2010 ANNUAL GROUNDWATER MONITORING REPORT

Boeing Former C-6 Facility
19503 South Normandie Avenue
Los Angeles, California

May 27, 2010

PREPARED FOR

The Boeing Company
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Project No. 1155.012

AVOCET ENVIRONMENTAL, INC.

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May 27, 2010 Project No. 1155.012

Ms. Ana Townsend
CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD LOS ANGELES REGION
320 West 4th Street, Suite 200
Los Angeles, California 90013

2010 Annual Groundwater Monitoring Report
Boeing Former C-6 Facility
19503 South Normandie Avenue
Los Angeles, California

Dear Ms. Townsend:

Enclosed is the 2010 Annual Groundwater Monitoring Report for the subject site. This monitoring report includes data gathered during the annual 2010 site-wide groundwater monitoring event conducted at the Boeing Former C-6 Facility located at 19503 South Normandie Avenue in Los Angeles, California. If you have any questions or require additional information, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Michael A. Rendina, P.G.
Principal

MAR:sh
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ASTM	ASTM International
bgs	below ground surface
B-Sand	Middle Bellflower B-Sand
CAM	California Assessment Manual
*p*CBSA	4-chlorobenzenesulfonic acid
COC	chain-of-custody
COD	chemical oxygen demand
C-Sand	Middle Bellflower C-Sand
1,1-DCA	1,1-dichloroethane
1,2-DCA	1,2-dichloroethane
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	*cis*-1,2-dichloroethene
trans-1,2-DCE	*trans*-1,2-dichloroethene
DHG	dissolved hydrocarbon gases
DO	dissolved oxygen
EC	electrical conductivity
EPA	U.S. Environmental Protection Agency
ILM	Industrial Light Metals
LARWQCB	California Regional Water Quality Control Board, Los Angeles Region
LBF	Lower Bellflower aquitard
LDC	Laboratory Data Consultants
l/min	liter per minute
MBFM	Middle Bellflower Mud
mg/l	milligram per liter
MRP	Monitoring and Reporting Program
mS/cm	millisiemen per centimeter
MSL	mean sea level
mV	millivolt
NDMA	n-nitrosodimethylamine
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
PCB	polychlorinated biphenyls
PID	photoionization detector
QA/QC	quality assurance/quality control
RPD	relative percent difference
SVOC	semivolatile organic compound
TCE	trichloroethene
TDS	total dissolved solids
TSS	total suspended solids
UBF	Upper Bellflower aquitard
µg/l	microgram per liter

VOC	volatile organic compound
WDR	Waste Discharge Requirements

1.0 INTRODUCTION

Avocet Environmental, Inc. (Avocet), on behalf of The Boeing Company (Boeing), has prepared this report for annual 2010 site-wide groundwater monitoring conducted at the Boeing Former C-6 Facility (the site) in Los Angeles, California (Figure 1). Annual monitoring included gauging and sampling wells site-wide. Groundwater monitoring was performed from March 22 through March 26, 2010 and was conducted in accordance with the following work plan.

- *2010 Groundwater Monitoring Work Plan* (the Work Plan; Avocet, February 15, 2010)

This Work Plan was approved for implementation by the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) in a letter to Boeing dated March 4, 2010.

The site-wide program is separate from groundwater monitoring conducted at the site under Monitoring and Reporting Program (MRP) No. CI-9310 and Individual Waste Discharge Requirements (WDR) Order No. R4-2007-0040 related to groundwater remediation. As such, the semiannual (Building 2 area) WDR monitoring, conducted concurrently with the subject annual site-wide monitoring event, will be presented in a separate report.

This report identifies the groundwater monitoring wells that were sampled and the constituents and parameters that were measured for the annual site-wide monitoring program. The remainder of this report presents the site background, the site-wide groundwater monitoring activities conducted in March 2010, and a summary of the results.

1.1 BACKGROUND

The Former C-6 Facility comprises approximately 170 acres and is bounded by 190th Street to the north; Normandie Avenue to the east; former industrial parcels, including the Montrose Chemical Superfund site (Montrose), to the south; and the former Industrial Light Metals (ILM) site to the west (Figure 2). Between approximately 1952 and 1992, the site was used for aerospace manufacturing operations. Operations at the site ceased in the mid-1990s, the buildings were demolished, and most of the parcels were sold and redeveloped for commercial/ light industrial uses. Environmental studies conducted at the site since the 1980s indicate that groundwater beneath the site contains volatile organic compounds (VOCs). These VOCs have been the focus of past and continuing remediation efforts at the site. More than 50 groundwater monitoring events have been performed at the site since 1987.

1.1.1 Site Geology

The site is located on the Torrance Plain physiographic area of the West Coast Basin and is underlain by the Lakewood Formation. The Lakewood Formation is subdivided into two principal hydrostratigraphic units: the Bellflower unit and the Gage aquifer. The Bellflower unit is further subdivided into the following:

- Upper Bellflower aquitard
- Middle Bellflower B-Sand
- Middle Bellflower Mud
- Middle Bellflower C-Sand (C-Sand)
- Lower Bellflower aquitard

The Upper Bellflower aquitard (UBF) comprises the upper 20 to 60 feet of the Bellflower unit and consists of fine-grained soils (predominantly fine sands, silts, and clays), which thicken to the east. A sandy zone (Middle Bellflower Sand) that dips downward to the east underlies the fine-grained soils. The Middle Bellflower Sand is generally 60 to 100 feet thick and is a massive, light yellowish-brown, fine to medium sand with discontinuous layers of fine-grained sediment (silt and clay) that also dip downward to the east. A fine-grained layer, referred to as the Middle Bellflower Mud (MBFM), locally interrupts this sand. The top sand subunits are referred to as the B-Sand and the bottom sand subunits as the C-Sand. The MBFM is discontinuous across the site, but where present, ranges in thickness from about 1 foot to 13 feet and is comprised of laminated clay, silt, and very fine sand. The MBFM thins toward the north and appears to be absent in the northern portion of the site (most of the former Building 1/36 portion of the site).

The Middle Bellflower B-Sand is underlain by the Lower Bellflower aquitard (LBF), another fine-grained zone, at depths ranging from about 120 to 140 feet below ground surface (bgs). The fine-grained LBF ranges in thickness from 10 to 20 feet and appears to be continuous across the site. The LBF separates the Middle Bellflower Sand from the underlying Gage aquifer.

1.1.2 Site Hydrogeology

Groundwater at the site is encountered at depths of approximately 55 to 70 feet bgs in the relatively permeable sediments of the Bellflower unit. Most of the groundwater monitoring wells at the site are installed in the B- and C-Sands within the Bellflower unit. Four wells have been installed onsite within the underlying Gage aquifer.

The B-Sand is found at approximate depths of 55 to 70 feet bgs at the site and is generally 25 to 40 feet thick. The B-Sand consists of predominately interbedded fine sands and silts. As shown in Figure 3, groundwater flow within the B-Sand is predominantly toward the south, with an average gradient of 0.0006 ft/ft.

The C-Sand is found at approximate depths of 90 to 110 feet bgs at the site and extends to depths of 120 to 140 feet bgs. The C-Sand consists largely of interbedded very fine sands with silt and clay. As shown in Figure 4, groundwater flow within the C-Sand is predominantly to the south and south-southwest, with an average gradient of 0.0007 ft/ft.

The Gage aquifer in the site vicinity occurs at an approximate depth of 150 feet bgs and ranges in thickness from 40 to 50 feet (Haley & Aldrich, December 8, 2005). The Gage aquifer is comprised largely of sand. Groundwater flow within the Gage aquifer is generally to the southeast, with an average gradient of 0.0006 ft/ft (Figure 5).

1.2 GROUNDWATER MONITORING WELL SUMMARY

Groundwater wells installed at the site are classified as follows:

- Wells installed by Boeing and its predecessors in support of groundwater monitoring and bioremediation pilot testing (prefixes include AW[1], CMW, DAC, EWB, EWC, IRZ, IWC, MWB, MWC, MWG, TMW, and WCC).
- Groundwater monitoring wells installed by ILM for investigations at its facility (prefix BL).
- Groundwater monitoring wells installed by Montrose for investigations at its facility (prefix XMW).

Groundwater investigations began in early 1987 with the installation of the first groundwater monitoring wells. Over the years, more than 95 groundwater monitoring wells were installed at the site. To accommodate redevelopment, a number of wells were destroyed in accordance with regulatory guidance, though certain wells were replaced to maintain the monitoring record.

As of March 2010, a total of 78 groundwater monitoring wells exist at the site; this includes two Montrose (XMW) wells and one ILM (BL) well. Completion details for all 78 groundwater monitoring wells are included in Table 1 and the well locations are shown in Figure 2.

More than 50 groundwater monitoring events have taken place at the site since monitoring began in 1987. All of the groundwater monitoring wells were typically sampled during each groundwater monitoring event, performed quarterly, until 1997. In 2000, the groundwater monitoring program was modified to two events per year: one full annual monitoring event and one plume-boundary-specific semiannual monitoring event (Kennedy/Jenks Consultants, December 15, 2000).

1.3 REPORT ORGANIZATION

Section 2.0 of this report describes the groundwater monitoring and sampling activities and quality assurance/quality control (QA/QC) measures. Summaries of the field and laboratory water quality data are provided in Section 3.0. The text is followed by references, tables, figures, and appendices.

Appendix A contains the groundwater sampling forms and field data. Appendix B presents historical groundwater level data. Water level hydrographs for representative wells are presented in Appendix C. Historical groundwater VOC analytical results are tabulated in Appendix D. Appendix E presents water quality hydrographs for prevalent VOCs in select plume boundary and site perimeter wells. The data validation records are included in Appendix F and a copy of the manifest documenting purge water disposal is presented in Appendix G. A CD containing a

[1] "AW" wells are injection wells exposed at the surface for monitoring purposes. These are separate from the other AW wells that have not been exposed.

PDF version of the subject report and copies of the laboratory reports and chain-of-custody forms is presented in Appendix H.

2.0 ANNUAL GROUNDWATER MONITORING

The site-wide annual monitoring event was performed from March 22 through March 26, 2010. Groundwater sampling was performed at 69 groundwater monitoring wells, including 6 wells sampled under the WDR program, as indicated in Tables 2a and 2b and shown in Figure 2. Also, water level gauging was conducted at one additional well. Two wells identified in the Work Plan for gauging and sampling in March 2010, Montrose Wells XMW-09 and XMW-19, were neither gauged nor sampled due to new access restrictions imposed by Montrose. Given the long-term record of consistent results from these wells, the absence of one or more records while access is negotiated is not considered problematic. Monitoring during the 2010 annual event consisted of the following activities:

- Pre-field activities including notification to the stakeholders.
- Measuring the concentrations of VOCs within the "headspace" of 70 groundwater monitoring wells using a calibrated photoionization detector (PID).
- Measuring static groundwater in 70 groundwater monitoring wells.
- Measuring field parameters, including pH, temperature, electrical conductivity (EC), turbidity, dissolved oxygen (DO), and oxidation reduction potential (ORP), using a calibrated sonde and flow-through cell at 69 wells.
- Analyzing approximately 10 percent of the samples in the field using a CHEMetrics, Inc. test kit (K-7512 or K-7540) as a QA check on DO measurements.
- Collecting groundwater samples from the 69 monitoring wells and submitting the samples to an analytical laboratory for analysis of VOCs using U.S. Environmental Protection Agency (EPA) Method 8260B.
- In support of feasibility evaluations, groundwater samples from 54 of the 69 wells sampled as part of the annual event were submitted to an analytical laboratory and evaluated for one or more of a variety of analytes as detailed in Tables 2a and 2b.
- Collecting QC samples consisting of duplicates (1 per 20 wells) and equipment/ rinsate and trip blanks.
- Perform data validation on approximately 10 percent of the laboratory data for the primary samples.

Each of these activities is described in further detail below.

2.1 PRE-FIELD ACTIVITIES

Prior to entering the field, interested stakeholders, including the owners and/or tenants of properties on the site requiring access, the environmental contractors for adjacent property owners (ILM [TRC Companies, Inc.]) with wells on the site that are part of the program, as well as staff of the LARWQCB were notified of the planned activities and schedule. In addition, the project environmental testing laboratory, TestAmerica, was notified of the schedule and laboratory program, and the appropriate sample containers were requested by way of a Laboratory Task Order.

2.2 WATER LEVEL GAUGING AND WELLHEAD VAPOR MONITORING

Prior to any groundwater sampling activities, wellhead vapor concentrations and depths to groundwater were measured within a single 12-hour period on March 22, 2010.

2.2.1 Wellhead Vapor Monitoring

The concentration of VOCs within the "headspace" of the monitoring wells is routinely measured as part of the fluid level gauging process at the Former C-6 Facility. The headspace concentration is measured immediately upon removal of the well cap by holding the intake of a PID just inside the monitoring well casing and recording the maximum reading on the Groundwater Monitoring Well Gauging Sheet (Appendix A).

2.2.2 Water Level Measurements

Water levels were then measured to the nearest one-hundredth of a foot from a surveyed reference point on top of the casing using a conductance-actuated well sounder. Care was taken to ensure that all down-hole equipment was properly calibrated and thoroughly decontaminated prior to use in any well. Water level measurements were recorded on the Groundwater Monitoring Well Gauging Sheets (Appendix A), as well as in an electronic format for upload to the project database. Also recorded on the gauging sheets was information on the surface condition of each well and any repairs/modifications required or that may have been conducted.

2.3 WELL PURGING

During the annual 2010 site-wide event, each sampling crew sampled groundwater monitoring wells in the order of increasing concentrations. The sampling order, shown in Table 2, was determined based on the most recent groundwater analytical data available and was honored for wells sampled using portable equipment.

Prior to collecting groundwater samples for chemical analysis, wells scheduled to be sampled were purged to assure representative samples were collected from the formation. With two exceptions, all site-wide monitoring wells were also purged using low-flow methodology. Due to the small (<0.75-inch) diameter of the well casings, Wells IRZB0095 and IRZB0081 were purged for sampling with a Waterra inertial pump and dedicated tubing using conventional (i.e., 3 to 5 wetted casing volumes) purging methods. Low-flow and conventional purging and sampling methods are described below.

2.3.1 Low-flow Purging

All monitoring wells sampled using the low-flow (minimal drawdown) method utilized a QED low-flow pneumatic (bladder) pump with adjustable flow rate controls to purge each well prior to collecting the samples. At each well, the pumps were installed with the intake positioned near the mid-point of the well screen. During purging, the flow rate at each location was maintained between 0.20 and 0.40 liter per minute (l/min) and the resultant drawdowns were well within ASTM International (ASTM) standards for all wells (ASTM, March 2002). QED MP20 or YSI 556 Water Quality Monitoring Systems with flow-through cells were used to record field water quality parameters (i.e., temperature, pH, EC, ORP, and DO) during the purging process. Also, for each well sampled, a Lamotte 2020 or HACH 2100P turbidimeter was used to record turbidity. The multiparameter meters and turbidimeters were calibrated in accordance with the manufacturer's instructions. Purging was considered complete upon stabilization of the water quality parameters. Water quality parameters were considered stable when three consecutive readings made several minutes apart fell within the following ranges:

- ±0.2 pH units
- ±3 percent of the EC measurement or 0.02 milliSiemen per centimeter (mS/cm), whichever is greater
- ±10 percent of the DO reading or ±0.2 milligram per liter (mg/l), whichever is greater
- ±20 millivolt (mV) for ORP measurements
- ±10 percent of the turbidity measurement or ±1.0 nephelometric turbidity unit (NTU), whichever is greater

As an additional calibration check, DO measurements were periodically field checked using a CHEMetrics test kit. Finally, upon completion of purging, samples from 25 wells were monitored for ferrous iron (Fe(II)) using a HACH DR890 colorimeter. Stabilized field water quality indicator parameters are summarized in Table 4 and the Groundwater Sampling Data Sheets are included in Appendix A.

2.3.2 Additional Purging

Wells IRZB0081 and IRZB0095 were purged to remove standing water in the well casing and promote the inflow of representative groundwater from the surrounding formation. The monitoring wells were purged using an inertial pump that operates by successively lowering and raising a small-diameter tube fitted with a bottom foot valve. The foot valve opens during the down-stroke and closes on the up-stroke, enabling water to progressively rise in the tube to discharge at surface. Well purging continued until three wetted casing volumes had been removed from the well. Wetted casing volumes were calculated using the static water level, total well depth, and casing diameter as indicated below:

$$V = \pi r^2 h \ (7.48)$$

where:

V = one wetted casing volume (gallons)
r = inner radius of well casing (in feet)
h = length of water column (in feet)

During purging, the volume of water extracted was measured in a graduated container.

2.4 SAMPLING AND ANALYSIS

When the purging criteria were achieved at each well, samples of the groundwater were collected from the dedicated tubing into appropriate laboratory-supplied containers. Each sample container was labeled in accordance with Boeing's Data Management Plan (CH2M Hill, 2007), and immediately placed on ice in a cooler. Under proper chain-of-custody protocols, the samples were transported by courier to TestAmerica Laboratories, Inc. (TestAmerica) in Irvine, California, a California-certified analytical laboratory.

All groundwater samples and QA/QC samples collected during the course of the 2010 annual site-wide monitoring program were analyzed by TestAmerica for VOCs using EPA Method 8260B. In addition, to obtain additional groundwater geochemical information to assist in evaluation of remedial options, a number of supplemental analyses were added to the sampling program. The supplemental analyses and laboratory program are summarized in Tables 2a and 2b and included analyzing samples from select wells across the site for one or more of the following:

- Dissolved hydrocarbon gases (DHGs – ethane, ethylene, and methane) using RSK 175
- Semivolatile organic compounds (SVOCs), including 1,4-dioxane, using EPA 8270C
- N-Nitrosodimethylamine (NDMA) using EPA 1625 MOD
- California Assessment Manual (CAM) Title 22 metals using EPA 245.1/200.7
- Flashpoint using EPA 1010
- Cyanides (total) using SM4500CN-E
- Sulfides (dissolved) using SM4500-S D
- Pesticides and polychlorinated biphenyls (PCBs) using EPA 608
- Chemical oxygen demand (COD) using SM5220D
- Total suspended solids (TSS) using SM2540D
- Hexavalent chromium using EPA 7199
- 4-Chlorobenzenesulfonic acid (*p*CBSA) using EPA 314.0 MOD
- Perchlorate using EPA 314.0
- Boron using EPA 200.7
- Anions (chloride, nitrate, nitrite, and sulfate) using EPA 300.0
- Total dissolved solids (TDS) using SM2540C

It is noted that samples collected from the WDR monitoring wells were also analyzed for additional parameters in accordance with the MRP. The results of these additional analyses are reported separately under the WDR reporting program.

2.5 MISCELLANEOUS

2.5.1 Equipment Decontamination

Nondedicated equipment used for well purging and sampling was cleaned prior to and between groundwater monitoring wells with an Alconox™ solution (or equivalent), then double-rinsed with tap water and deionized or distilled water to reduce the potential for cross-contamination.

2.5.2 Waste Management

Purge water generated during groundwater monitoring activities was placed within appropriately labeled 55-gallon drums and temporarily stored adjacent to the treatment compound pending profiling and final disposition. Approximately 90 gallons of purge and decontamination water were generated during the March 2010 monitoring event. The water was profiled and determined to be nonhazardous. A nonhazardous waste manifest documenting the transport and disposal of this water is presented in Appendix G.

2.5.3 Project Database

Prior to initiation of groundwater monitoring activities, the sampling requirements were incorporated into a field database. The field database was created to track each well sampled, to verify that samples collected from each well were being submitted to the analytical laboratories for the correct suite of analyses, and to assist in the management of field data required to be uploaded to the project database, currently being maintained by CRI+IGEN, of Santa Ana, California. Additionally, the field database was used to prepare "pre-sampling packets" for each field sampling crew with properly labeled monitoring sheets and pre-filled-out sample labels for each of the target wells. At the end of each day, the field database was then used to prepare the chain-of-custody (COC) record and generate the field monitoring log and the daily sample log, which were uploaded to the project database. The COC and sample log were prepared using the same data input to eliminate potential transcription errors. The field monitoring log was transcribed from field monitoring forms (Appendix A) by field personnel and included depth to water and stabilized field water quality parameters for each well sampled during the day.

Upon completion of sample analyses by the analytical laboratories, the primary laboratory, TestAmerica, of Irvine, California, uploaded the results of analyses to the project database.

2.6 QUALITY ASSURANCE/QUALITY CONTROL

2.6.1.1 Duplicate Samples

Four duplicate groundwater samples were collected as a check for sample homogeneity and laboratory precision. The samples were from Wells MWC016, MWC022, MWC024, and WCC_06S, and were collected, packaged, and sealed in the same manner as the primary samples. The duplicate samples were analyzed for VOCs using EPA Method 8260B. A

comparison of the primary and duplicate analytical results is provided in Table 6. As shown in Table 6, the precision for the duplicate samples ranged from 0 to 20 relative percent difference (RPD). Generally, for Boeing sites, precision criteria for VOCs is 25 percent RPD (Ogden, 2000). The mean RPD for the 21 analytes in the four samples is 7 percent; well within the range of acceptable precision.

2.6.1.2 Equipment/Rinsate Blanks

Three equipment blank samples were collected during the annual 2010 sampling event, one for each day that groundwater samples were collected using portable equipment. The equipment blanks were collected from sampling equipment that was cleaned and reused in the field as a check for cross-contamination. Following decontamination procedures, deionized water provided by the laboratory was used to fill or rinse the sampling equipment after the equipment had been cleaned, then collected in sample containers. The equipment/rinsate blanks were analyzed for VOCs using EPA Method 8260B. Analytical results indicated that no VOCs were detected in any of the three equipment blank samples.

2.6.1.3 Trip Blanks

One trip blank was analyzed for each day that groundwater samples were submitted to the laboratory (four trip blanks total). The trip blanks, prepared in a clean environment, were provided by the analytical laboratory and kept in the cooler used to ship the samples. The trip blanks, which provide a check for contamination prior to and during transport, were analyzed for VOCs using EPA Method 8260B. VOCs were not detected in any of the four trip blank samples.

2.6.1.4 Data Validation

Data validation was performed by Laboratory Data Consultants, Inc. (LDC), of Carlsbad, California. A copy of the data validation report for samples collected from Wells EWB002, WCC_06S, MWB027, AW0074UB, IRZB0095, MWC022, and WCC_07S is attached as Appendix F. The validation process followed the EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA, October 1999). Approximately 10 percent of the laboratory data was reviewed to verify that the data are of acceptable quality.

Seven samples collected on March 25, 2010 were selected for validation. Five of the samples (EWB002, WCC_06S, MWB027, AW0074UB, and IRZB0095) were subjected to Tier 1 validation, one (MWC022) to Tier 2 validation, and one (WCC_07S) underwent Tier 3 review. As indicated in LDC's validation report (Appendix F), several data quality criteria, including percent differences relative to initial and continuing calibration checks and percent recoveries of certain VOCs in matrix spike/matrix spike duplicate and laboratory control samples, resulted in the application of data qualifiers (i.e., flags) to certain analytes. Overall, the criteria exceedances do not appear to have negatively impacted the analytical results, particularly the principal compounds, including trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE). Therefore, based on the results of the data validation, the data are considered usable for project purposes.

3.0 GROUNDWATER MONITORING RESULTS

This section presents an evaluation of the groundwater monitoring and sampling results for the site-wide annual monitoring event performed from March 22 through March 26, 2010. Included in this evaluation are discussions of groundwater elevations and groundwater quality in the B-Sand, C-Sand, and Gage aquifer water-bearing units.

3.1 GROUNDWATER ELEVATIONS

Prior to groundwater sampling, each of the site-wide monitoring wells was gauged for depth to groundwater and total depth, measured relative to the top of the well casings, on March 22, 2010. Well completion details, including the reference elevations used to calculate groundwater elevations, are provided in Table 1. The water levels were measured using electric well sounders immediately after accessing each well and prior to any artificial water level disturbance. Groundwater elevations were calculated in feet from mean sea level (feet MSL) by subtracting the depth to groundwater in each well from the surveyed top of casing elevation. Copies of the field water level measurement forms are included in Appendix A. Groundwater monitoring well locations are shown in Figure 2. A summary of the groundwater elevations for March 2010 is presented in Table 3. Historical water level data are presented in Appendix B. Groundwater elevation hydrographs for select B-Sand and C-Sand wells and the Gage aquifer wells are included in Appendix C.

3.1.1 B-Sand

The depth to groundwater for wells screened in the B-Sand ranged from 56.8 to 66.3 feet below the top of casings, which corresponds to groundwater elevations ranging from -7.44 to -5.46 feet MSL. B-Sand groundwater elevation contours generated from the March 2010 water level data are presented in Figure 3. The average hydraulic gradient in the B-Sand across the site is approximately 0.0006 ft/ft. As shown in Figure 3, groundwater flow direction in the B-Sand is generally to the south. The groundwater contours depict a localized groundwater mound surrounding the Building 1/36 area amendment injection wells, an artifact of the recirculation activities that were concluded on July 31, 2008 (Avocet, January 26, 2009).

3.1.2 C-Sand

The depth to groundwater for wells screened in the C-Sand ranged from 58 to 63.2 feet bgs, which corresponds to groundwater elevations ranging from -7.91 to -6.33 feet MSL. Groundwater elevation contours generated from the March 2010 water level data are presented in Figure 4. At the site, groundwater generally flows to the south and south-southwest, with an average hydraulic gradient of approximately 0.0007 ft/ft.

3.1.3 Gage Aquifer

The depth to groundwater in the four Gage aquifer wells ranged from 60.6 to 63.6 feet bgs, which corresponds to groundwater elevations ranging from -8.84 to -8.36 feet MSL. Groundwater elevation contours generated from the March 2010 water level data are presented in

Figure 5. The average hydraulic gradient in the Gage aquifer at the site is approximately 0.0006 ft/ft. The groundwater flow direction is generally toward the southeast.

3.2 FIELD WATER QUALITY PARAMETERS

Field water quality parameters, including pH, DO, ORP, EC, turbidity, and temperature were measured during purging of the groundwater monitoring wells. Copies of the field groundwater sampling data sheets for the March 2010 site-wide sampling event are provided in Appendix A. Table 4 presents a summary of the stabilized field water quality parameters.

3.3 GROUNDWATER QUALITY

Each of the site-wide B-Sand, C-Sand, and Gage aquifer wells sampled were analyzed for VOCs using EPA Method 8260B. Additionally, 54 wells located throughout the site and completed in all three of the water-bearing units were analyzed for one or more of a variety of analytes, as described in Section 2.4 and summarized in Tables 2a and 2b. The results of VOC sample analyses are summarized in Table 5. SVOC sample analyses are summarized in Table 7 and pesticide/PCB analytical results are presented in Table 8. Table 9 summarizes the metals (17 CAM plus boron and hexavalent chromium) analytical results, and Table 10 summarizes the results of 1,4-dioxane, NDMA, perchlorate, and *p*CBSA analyses. Table 11 presents the results of various inorganic tests, including TDS, TSS, and COD, and the DHG results are summarized in Table 12. A historical summary of select VOCs in groundwater is presented in Appendix D. Concentration-versus-time graphs for prevalent VOCs in select plume and property boundary and Gage aquifer wells are presented in Appendix E. Copies of the laboratory analytical reports are included on the CD in Appendix H.

3.3.1 B-Sand

A total of 43 wells completed in the B-Sand were sampled in March 2010 as part of the annual site-wide monitoring event. TCE was the most prevalent VOC found in the B-Sand, both in terms of concentration and frequency of detection. Specifically, TCE was detected in 41 of the 43 B-Sand wells sampled in March 2010, with a maximum detected concentration of 12,000 µg/l in Well IRZMW003A, located within the former Building 2 source area. The distribution of TCE in the B-Sand wells is depicted in Figure 6.

1,1-DCE, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and chloroform were the next most prevalent compounds and were found in 36, 33 and 32 of the 43 B-Sand wells, respectively. 1,1-DCE was detected at a maximum concentration of 11,000 micrograms per liter (µg/l) in Well WCC_03S, located in the former Building 1/36 source area. The distribution of 1,1-DCE in the B-Sand wells is shown in Figure 7. As shown in Figure 7, 1,1-DCE concentrations are highest in the northern half of the site, particularly near the former Building 1/36 area. Concentrations of *cis*-1,2-DCE ranged from an estimated 0.64 µg/l to 2,900 µg/l. The highest concentration of *cis*-1,2-DCE was detected in a well monitoring the former Building 2 source area (IRZMW002A). Concentrations of chloroform ranged from an estimated 0.36 µg/l to 2,300 µg/l. The highest concentration of chloroform was detected in a well located near the southern margin of the site, immediately north of the Montrose site (MWB019).

As shown in Table 5, other prevalent VOCs include 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), benzene, tetrachloroethene, toluene, *trans*-1,2-dichloroethene (*trans*-1,2-DCE), and vinyl chloride.

3.3.2 C-Sand

During the March 2010 site-wide monitoring event, 21 wells completed in the C-Sand were sampled and analyzed for VOCs. Six of these wells were sampled in conjunction with WDR monitoring associated with the bioremediation pilot test being conducted in the former Building 2 area.

TCE was the most prevalent VOC found in the C-Sand, both in terms of concentration and the frequency of detections. The distribution of TCE in the C-Sand wells is shown in Figure 8. TCE was detected in 20 of the C-Sand wells sampled in March 2010 at concentrations ranging from an estimated 1.1 µg/l to 1,900 µg/l. The highest concentration of TCE occurred in well MWC024, located in the southern portion of the former Building 2 area immediately west of the eastern building.

1,1-DCE and *cis*-1,2-DCE were the second most prevalent compounds detected, each found in 18 and 19 of the 21 C-Sand wells, respectively. 1,1-DCE was detected at concentrations ranging from an estimated 0.71 to 3,300 µg/l. The distribution of 1,1-DCE in the C-Sand is shown in Figure 9. The highest concentrations of 1,1-DCE occurred in Wells EWC001 and MWC023, located in the former Building 1/36 area. Concentrations of *cis*-1,2-DCE ranged from an estimated 0.4 to 1,500 µg/l, with the highest concentration also detected in Well EWC001.

As shown in Table 5, other VOCs with multiple detections include 1,1-DCA, 1,2-DCA, benzene, chloroform, *trans*-1,2-DCE, and vinyl chloride.

3.3.3 Gage Aquifer

Four Gage aquifer wells were sampled in March 2010 as part of the annual groundwater monitoring program. Samples from each well were analyzed for VOCs. The locations of the four Gage aquifer wells, MWG001 through MWG004, are shown in Figure 2.

Several VOCs, including TCE, 1,1-DCE, and *cis*-1,2-DCE, were detected in one or more of the four Gage aquifer wells sampled in March 2010. The highest concentration of TCE (73 µg/l) was detected in the sample from Well MWG003 and the highest concentration of 1,1-DCE (200 µg/l) was detected in Well MWG0001. The highest concentration of *cis*-1,2-DCE was detected in Well MWG002 at 570 µg/l.

A summary of the historical VOC data is provided in Appendix D.

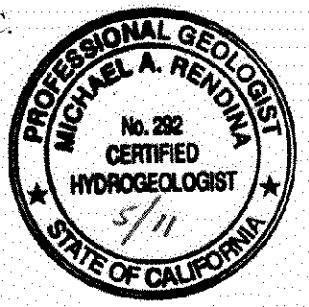
3.4 RECOMMENDATION

No change in the current site-wide monitoring program is recommended at this time.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.

Michael A. Rendina, P.G.
Principal



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Tables

AVOCET
ENVIRONMENTAL, INC.

Table 1
Groundwater Monitoring Well Completion Details
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Water-Bearing Unit	Easting[1,3]	Northing[1,3]	Reference Elevation (feet amsl)[2]	Boring Total Depth (feet)	Screen Depth Interval (feet)	Depth to Top of Filter Pack (feet)	Casing Diameter (inches)	Casing Type	Slot Size (inches)	Drilled Date
B-Sand Monitoring Wells											
AW0055UB	Upper B-Sand	6,470,304	1,769,863	53.54	92	69 - 89	65	2	Sch 40 PVC	0.02	06/21/05
AW0064UB	Upper B-Sand	6,470,346	1,769,801	53.28	92	68.5 - 88.5	66	2	Sch 40 PVC	0.02	06/21/05
AW0065UB	Upper B-Sand	6,470,316	1,769,802	53.64	92	68.5 - 88.5	66	2	Sch 40 PVC	0.02	06/16/05
AW0066UB	Upper B-Sand	6,470,286	1,769,802	53.98	91	69.5 - 89.5	67	2	Sch 40 PVC	0.02	06/14/05
AW0067UB	Upper B-Sand	6,470,261	1,769,810	54.01	91	70 - 90	67	2	Sch 40 PVC	0.02	06/08/05
AW0074UB	Upper B-Sand	6,470,365	1,769,759	52.73	91	70 - 90	67	2	Sch 40 PVC	0.02	06/09/05
AW0075UB	Upper B-Sand	6,470,332	1,769,740	53.23	93	69 - 89	66	2	Sch 40 PVC	0.02	06/08/05
AW0076UB	Upper B-Sand	6,470,302	1,769,740	53.69	92	69 - 89	66	2	Sch 40 PVC	0.02	06/08/05
AW0077UB	B-Sand	6,470,254	1,769,763	53.96	86	70.5 - 85.5	69	2	Sch 40 PVC	0.02	08/19/04
BL-03	B-Sand	6,468,962	1,768,747	58.66	79	59 - 79	56	2	Sch 40 PVC	0.01	02/08/99
DAC-P1	B-Sand	6,468,953	1,769,774	55.13	90	60 - 90	55	4	Sch 40 PVC	0.01	09/25/89
EWB001	B-Sand	6,470,381	1,769,604	49.14	84.7	59.2 - 89.2	56	6	Sch 80 PVC	0.02	11/09/06
EWB002	B-Sand	6,470,279	1,769,773	53.74	90	60 - 90	56	6	Sch 80 PVC	0.02	06/13/07
MW0005	B-Sand	6,470,232	1,769,063	52.1	85	65 - 85	63	4	Sch 40 PVC	0.01	08/08/03
MWB003	B-Sand	6,470,193	1,769,474	56.95	92	65 - 90	63	2	Sch 40 PVC	0.02	11/30/05
MWB006	B-Sand	6,470,251	1,770,051	53.9	93	65 - 90	63	2	Sch 40 PVC	0.02	12/01/05
MWB007	B-Sand	6,470,211	1,770,213	51.39	92	60 - 90	57	4	Sch 40 PVC	0.02	06/06/05
MWB012	B-Sand	6,470,035	1,769,019	52.43	90.5	64.5 - 84.5	62	4	Sch 40 PVC	0.02	05/17/04
MWB013	B-Sand	6,469,592	1,769,396	55.33	86.5	65 - 85	62	4	Sch 40 PVC	0.02	05/17/04
MWB014	B-Sand	6,470,280	1,768,387	51.69	86.5	65 - 85	62	4	Sch 40 PVC	0.02	05/17/04
MWB019	B-Sand	6,469,970	1,768,093	55.18	90.5	65 - 85	62	4	Sch 40 PVC	0.02	05/17/04
MWB020	B-Sand	6,470,396	1,770,863	51.07	120.5	59.5 - 89.5	56	4	Sch 40 PVC	0.02	06/06/05
MWB027	B-Sand	6,469,948	1,769,934	57.14	91.5	67.5 - 87.5	65	2	Sch 40 PVC	0.02	11/30/05
MWB028	B-Sand	6,470,106	1,769,475	56.84	93	65 - 90	63	2	Sch 40 PVC	0.02	12/01/05
TMW_04	B-Sand	6,470,254	1,769,116	51.39	84	58 - 78	56	2	Sch 40 PVC	0.01	06/30/98
TMW_06	B-Sand	6,470,299	1,768,718	51.72	93	67 - 87	66	2	Sch 40 PVC	0.01	07/01/98
TMW_07	B-Sand	6,470,318	1,769,483	53.96	91	65 - 85	63	2	Sch 40 PVC	0.01	06/29/98
TMW_08	B-Sand	6,470,329	1,769,594	53.98	90	61 - 81	59	2	Sch 40 PVC	0.01	06/29/98
TMW_10	B-Sand	6,470,723	1,768,951	49.92	85	60.5 - 80.5	58	2	Sch 40 PVC	0.01	01/28/99
TMW_11	B-Sand	6,470,721	1,768,204	49.85	83	58 - 78	55	2	Sch 40 PVC	0.01	02/01/99
TMW_14	B-Sand	6,469,550	1,768,199	58.91	90	65 - 85	63	2	Sch 40 PVC	0.01	02/03/99
TMW_15	B-Sand	6,469,555	1,768,950	57.65	92	62 - 87	60	2	Sch 40 PVC	0.01	02/04/99

AVOCET ENVIRONMENTAL, INC.

Table 1
Groundwater Monitoring Well Completion Details
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Water-Bearing Unit	Easting[1,3]	Northing[1,3]	Reference Elevation (feet amsl)[2]	Boring Total Depth (feet)	Screen Depth Interval (feet)	Depth to Top of Filter Pack (feet)	Casing Diameter (inches)	Casing Type	Slot Size (inches)	Drilled Date
WCC_03S	B-Sand	6,470,367	1,770,021	52.8	92	69 - 89	64	4	Sch 40 PVC	0.01	10/26/87
WCC_04S	B-Sand	6,470,499	1,769,857	52.23	92	70.5 - 90.5	65	4	Sch 40 PVC	0.01	10/27/87
WCC_05S	B-Sand	6,470,722	1,769,779	52.82	91	61 - 91	64	4	Sch 40 PVC	0.01	11/24/87
WCC_06S	B-Sand	6,470,336	1,769,734	52.52	91	60 - 90	54	4	Sch 40 PVC	0.01	09/22/89
WCC_07S	B-Sand	6,470,505	1,769,695	52.21	91	60 - 90	54	4	Sch 40 PVC	0.01	06/08/89
WCC_09S	B-Sand	6,470,683	1,769,409	54.96	92	60 - 90	55	4	Sch 40 PVC	0.01	09/21/89
WCC_12S	B-Sand	6,470,506	1,769,496	51.32	92	60 - 90	55	4	Sch 40 PVC	0.01	09/17/90
XMW-09	B-Sand	6,470,407	1,767,930	53.16	80	61 - 76	-	4	-	-	05/09/89
XMW-19	B-Sand	6,470,722	1,768,538	49.38	80	62 - 77	-	4	-	-	03/30/90
C-Sand Monitoring Wells											
AW0073C	C-Sand	6,470,329	1,769,765	53.42	117	96 - 116	93	2	Sch 40 PVC	0.02	06/09/05
CMW001	C-Sand	6,470,700	1,768,183	54.37	124	99 - 124	97	4	Sch 40 PVC	0.01	08/15/03
CMW002	C-Sand	6,470,554	1,767,936	52.81	124	99 - 124	97	4	Sch 40 PVC	0.01	08/14/03
CMW026	C-Sand	6,470,279	1,768,603	51.53	117	92 - 117	90	4	Sch 40 PVC	0.01	08/06/03
EWC001	C-Sand	6,470,359	1,769,706	52.59	125	97 - 122	94	4	Sch 80 PVC	0.02	11/08/06
EWC002	C-Sand	6,470,267	1,768,368	51.76	125	96 - 121	93	4	Sch 80 PVC	0.02	10/20/06
IWC001	C-Sand	6,470,121	1,768,453	53.05	125	95 - 115	92	4	Sch 80 PVC	0.02	11/02/06
IWC002	C-Sand	6,470,239	1,768,669	51.56	125	96 - 116	93	4	Sch 80 PVC	0.02	10/31/06
MWC004	C-Sand	6,470,486	1,769,491	51.86	118	96 - 116	93	4	Sch 40 PVC	0.02	06/07/05
MWC006	C-Sand	6,470,252	1,770,037	54.03	117.5	95 - 115	93	2	Sch 40 PVC	0.02	11/29/05
MWC007	C-Sand	6,470,172	1,770,172	51.57	119	97 - 117	93.5	4	Sch 40 PVC	0.02	06/03/05
MWC009	C-Sand	6,470,658	1,769,365	53.99	125	101 - 121	97.5	4	Sch 40 PVC	0.02	04/28/05
MWC011	C-Sand	6,470,263	1,769,749	54.03	117	94 - 114	92	2	Sch 40 PVC	0.02	11/29/05
MWC015	C-Sand	6,470,304	1,768,821	51.51	128	100 - 125	99	4	Sch 40 PVC	0.02	05/17/04
MWC016	C-Sand	6,469,987	1,768,720	52.61	131	102.5 - 127.5	101	4	Sch 40 PVC	0.02	05/17/04
MWC017	C-Sand	6,469,979	1,768,093	55.16	128	100 - 125	99	4	Sch 40 PVC	0.02	05/17/04
MWC021	C-Sand	6,470,705	1,768,939	54.53	126	97 - 122	94.5	4	Sch 40 PVC	0.02	05/17/04
MWC022	C-Sand	6,470,454	1,769,986	51.6	120	97 - 117	93.5	4	Sch 40 PVC	0.02	06/07/05
MWC023	C-Sand	6,470,428	1,769,802	51.43	120	97 - 117	94	4	Sch 40 PVC	0.02	06/07/05
MWC024	C-Sand	6,470,266	1,768,409	51.64	125	96 - 121	93	4	Sch 80 PVC	0.02	10/26/06

AVOCET ENVIRONMENTAL, INC.

Table 1
Groundwater Monitoring Well Completion Details
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Water-Bearing Unit	Easting[1,3]	Northing[1,3]	Reference Elevation (feet amsl)[2]	Boring Total Depth (feet)	Screen Depth Interval (feet)	Depth to Top of Filter Pack (feet)	Casing Diameter (inches)	Casing Type	Slot Size (inches)	Drilled Date
Bioremediation Monitoring Wells											
IRZB0081	B-Sand	6,470,037	1,768,714	52.92	-	64.5 - 89.5	63	0.75	Sch 40 PVC	0.01	09/04/03
IRZB0095	B-Sand	6,470,038	1,768,619	52.7	-	65 - 90	63.2	0.75	Sch 40 PVC	0.01	09/05/03
IRZMW001A	B-Sand	6,469,844	1,768,988	56.77	-	65 - 75	63	1.5	Sch 40 PVC	0.01	06/26/02
IRZMW001B	B-Sand	6,469,844	1,768,988	56.7	-	80 - 90	79	1.5	Sch 40 PVC	0.01	06/26/02
IRZMW002A	B-Sand	6,469,840	1,768,989	56.66	-	68 - 78	66	1.5	Sch 40 PVC	0.01	06/03/03
IRZMW002B	B-Sand	6,469,840	1,768,989	56.76	-	83 - 93	82	1.5	Sch 40 PVC	0.01	06/03/03
IRZMW003A	B-Sand	6,469,867	1,768,985	56.73	-	61 - 71	60	1.5	Sch 40 PVC	0.01	06/02/03
IRZMW003B	B-Sand	6,469,867	1,768,985	56.78	-	80 - 90	79	1.5	Sch 40 PVC	0.01	06/02/03
IRZMW004	B-Sand	6,470,051	1,768,610	53.06	-	65 - 90	63	4	Sch 40 PVC	0.01	09/04/03
IRZMW005	B-Sand	6,470,038	1,768,708	52.77	-	65 - 90	63	4	Sch 40 PVC	0.01	09/05/03
IRZCMW001	C-Sand	6,470,218	1,768,660	51.74	117	92 - 117	90	4	Sch 40 PVC	0.01	08/06/03
IRZCMW002	C-Sand	6,470,417	1,768,410	55.6	121	96 - 121	94	4	Sch 40 PVC	0.01	05/12/04
IRZCMW003	C-Sand	6,470,298	1,768,593	51.69	117	92 - 117	90	4	Sch 40 PVC	0.01	08/08/03
Gage Aquifer Monitoring Wells											
MWG001	Gage Aquifer	6,470,706	1,769,149	54.13	190	156 - 186	152	2	Sch 40 PVC	0.02	04/22/05
MWG002	Gage Aquifer	6,470,705	1,768,452	54.78	195	162 - 192	158	2	Sch 40 PVC	0.02	04/28/05
MWG003	Gage Aquifer	6,470,056	1,768,915	53.079	185	154.5 - 184.5	150	2	Sch 40 PVC	0.02	09/12/05
MWG004	Gage Aquifer	6,470,230	1,768,389	52.049	186	155 - 185	150	2	Sch 40 PVC	0.02	09/12/05

Notes:

(1) California State Plane North American Datum of 83 (NAD 83), Zone 5, Feet

(2) feet amsl = feet above mean sea level; elevations based on North American Vertical Datum of 1988 (NAVD 88)

(3) Coordinates were slightly revised based on additional survey done in November 2006

"-" = unknown

AVOCET ENVIRONMENTAL, INC.

Table 2a
March 2010 Site-Wide Groundwater Monitoring Program
Boeing Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (µg/l)	Sampling Order	Dedicated Pump?	March 2010 Annual Event Analytical Program: Methane Wellhead Monitoring	Water Level Gauging	VOCs EPA 8260B	Field Parameters[1]	Ferrous Iron?	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene RSK 175	WDR Analyses?	Comments
B-Sand Monitoring Wells												
BL-03	B-Sand	533	38			x	x	x				
DAC-P1	B-Sand	10,116	70			x	x	x				
EWB001	B-Sand	143	28		x	x	x	x				
EWB002	B-Sand	82	23	Yes	x	x	x	x	Yes[2]	x		Analyses for continued bio evaluation
MW0005	B-Sand	1,871	56		x	x	x	x				
MWB003	B-Sand	5,615	69		x	x	x	x		x		Routine GWM + extent of CH4 in GW
MWB006	B-Sand	17,000	75	Yes	x	x	x	x	Yes[2]	x		Analyses for continued bio evaluation
MWB007	B-Sand	2,858	64	Yes	x	x	x	x				Added methane wellhead monitoring
MWB012	B-Sand	917	45		x	x	x	x		x		Routine GWM + extent of CH4 in GW
MWB013	B-Sand	5	5	Yes	x	x	x	x				Added methane wellhead monitoring
MWB014	B-Sand	107	27		x	x	x	x				
MWB019	B-Sand	350	35	Yes	x	x	x	x				Added methane wellhead monitoring
MWB020	B-Sand	30	16	Yes	x	x	x	x		x		
MWB027	B-Sand	969	47	Yes	x	x	x	x		x		Routine GWM + extent of CH4 in GW
MWB028	B-Sand	916	44		x	x	x	x				Added methane wellhead monitoring
TMW_04	B-Sand	1,386	53		x	x						Water level measurement only + methane WH monitoring
TMW_06	B-Sand	79	22		x	x	x	x				
TMW_07	B-Sand	1,100	49	Yes	x	x	x	x				
TMW_08	B-Sand	1,161	52		x	x	x	x				
TMW_10	B-Sand	10	11	Yes	x	x	x	x				
TMW_11	B-Sand	6	9	Yes	x	x	x	x				
TMW_14	B-Sand	8	10	Yes	x	x	x	x				Added methane wellhead monitoring
TMW_15	B-Sand	21	14	Yes	x	x	x	x		x		Routine GWM + extent of CH4 in GW
WCC_03S	B-Sand	13,174	72	Yes	x	x	x	x		x		Routine GWM + extent of CH4 in GW
WCC_04S	B-Sand	0	1	Yes	x	x	x	x		x		Routine GWM + extent of CH4 in GW
WCC_05S	B-Sand	2	4	Yes	x	x	x	x				
WCC_06S	B-Sand	418	36	Yes	x	x	x	x	Yes[2]			
WCC_07S	B-Sand	182	31	Yes	x	x	x	x		x		Routine GWM + extent of CH4 in GW
WCC_09S	B-Sand	51	21	Yes	x	x	x	x				
WCC_12S	B-Sand	27	15	Yes	x	x	x	x				
XMW-09	B-Sand	91	24		x	x	x	x				
XMW-19	B-Sand	6	8		x	x	x	x				
C-Sand Monitoring Wells												
CMW001	C-Sand	0	1	Yes	x	x	x	x				Added methane wellhead monitoring
CMW002	C-Sand	1,100	49	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program
CMW026	C-Sand	547	40	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program
EWC001	C-Sand	4,432	67		x	x	x	x				Added methane wellhead monitoring
EWC002	C-Sand											No sampling or gauging
IWC001	C-Sand	2,016	57		x	x	x	x				Added methane wellhead monitoring
IWC002	C-Sand	1,694	55									No sampling or gauging
MWC004	C-Sand	101	25	Yes	x	x	x	x				
MWC006	C-Sand	15	12		x	x	x	x				Added methane wellhead monitoring
MWC007	C-Sand	2	3	Yes	x	x	x	x				Added methane wellhead monitoring
MWC009	C-Sand	164	30	Yes	x	x	x	x				Added methane wellhead monitoring
MWC011	C-Sand	105	26		x	x	x	x				Added methane wellhead monitoring
MWC015	C-Sand	757	42		x	x	x	x				Added methane wellhead monitoring
MWC016	C-Sand	1,620	54		x	x	x	x				Added methane wellhead monitoring
MWC017	C-Sand	921	46	Yes	x	x	x	x				Added methane wellhead monitoring
MWC021	C-Sand	16	13	Yes	x	x	x	x				Added methane wellhead monitoring
MWC022	C-Sand	38	18	Yes	x	x	x	x				Added methane wellhead monitoring
MWC023	C-Sand	909	43	Yes	x	x	x	x				Added methane wellhead monitoring
MWC024	C-Sand	2,315	62	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program

AVOCET ENVIRONMENTAL, INC.

Table 2a
March 2010 Site-Wide Groundwater Monitoring Program
Boeing Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (µg/l)	Sampling Order	Dedicated Pump?	March 2010 Annual Event Analytical Program							Comments
					Methane Wellhead Monitoring	Water Level Gauging	VOCs EPA 8260B	Field Parameters[1]	Ferrous Iron?:	Dissolved Hydrocarbon Gases (DHGs) Methane, Ethane, Ethene RSK 175	WDR Analyses?	
Gage Monitoring Wells												
MWG001	Gage	33	17	Yes		x	x	x				
MWG002	Gage	466	37	Yes		x	x	x				
MWG003	Gage	163	29	Yes		x	x	x				
MWG004	Gage	44	20	Yes		x	x	x				
Former and Current Bioremediation Monitoring Wells (B- and C-Sand Wells)												
AW0055UB	Upper B-Sand	19,470	77	Yes	x	x	x	x	Yes[2]	x		Added DHGs and iron for continued bio evaluation
AW0064UB	Upper B-Sand	2,450	63	Yes	x	x	x	x	Yes[2]	x		Analyses for continued bio evaluation
AW0065UB	Upper B-Sand	251	33	Yes								No sampling or gauging
AW0066UB	Upper B-Sand	5	6	Yes								No sampling or gauging
AW0067UB	Upper B-Sand	6	7	Yes								No sampling or gauging
AW0074UB	Upper B-Sand	10,540	71	Yes	x	x	x	x	Yes[2]	x		Added DHGs and iron for continued bio evaluation
AW0075UB	Upper B-Sand	2,259	60	Yes	x	x	x	x	Yes[2]	x		Analyses for continued bio evaluation
AW0076UB	Upper B-Sand	195	32	Yes								No sampling or gauging
AW0077UB	Upper B-Sand	39	19	Yes	x	x	x	x	Yes[2]	x		Added DHGs and iron for continued bio evaluation
AW0073C	C-Sand	293	34	Yes	x	x	x	x	Yes[2]	x		Analyses for continued bio evaluation
IRZB0081	B-Sand	2,287	61		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZB0095	B-Sand	2,113	59		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW001A	B-Sand	15,690	74		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW001B	B-Sand	535	39		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW002A	B-Sand	15,302	73		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW002B	B-Sand	582	41		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW003A	B-Sand	17,853	76		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW003B	B-Sand	2,103	58		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW004	B-Sand	3,784	65		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZMW005	B-Sand	3,972	66		x	x	x	x	Yes[2]	x		Analyses for bio eval of past injections+CH4 WH Monitoring
IRZCMW001	C-Sand	1,027	48	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program
IRZCMW002	C-Sand	1,126	51	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program
IRZCMW003	C-Sand	5,090	68	Yes	x	x	x	x	Yes[2]	x	Yes[3]	Monitored under Building 2 WDR Program
Subtotals		Site-wide Program			66	72	71	71	25	32	-	
		WDR Program			6	6	6	6	-	6	6	
Quality Control Samples[4]												
Duplicates (1 per 20 wells)							x (4)					
Rinsate Blanks (1 per day)							x (4)					
Trip Blanks (1 per day)							x (6)					
		Totals			66	72	85	71	25	32	6	

Notes:
VOCs = volatile organic compounds using EPA Method 8260B
Field Parameters = pH, dissolved oxygen (DO), redox, turbidity, electrical conductivity, and temperature.
(1) As a quality assurance check on DO measurements, 10 percent of the samples will be analyzed in the field using a CHEMetrics, Inc test kit (K-7512 or K-7540).
(2) Test for ferrous iron using the Hach DR890 Colorimeter - not required by WDR after Year 1.
(3) Analyze samples in accordance with the Building 2 WDR Program.
(4) Quality control sample number based on number of wells and estimated number of sampling days.

AVOCET ENVIRONMENTAL, INC.

Table 2b
Additional Analyses - March 2010 Site-Wide Groundwater Monitoring Event
Boeing Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (µg/l)	Sampling Order	Dedicated Pump?	March 2010 - Additional Analytes																Comments
					SVOCs (incl. 1,4-dioxane and NDMA) [1]	CAM Title 22 Metals	Flashpoint	Cyanides (total)	Sulfides (dissolved)	pH	Temperature	Pesticides/PCBs	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium	pCBSA	Perchlorate	Boron	Anions (NO_3, NO_2, Cl, SO_4) EPA 300.0	Total Dissolved Solids EPA 160.1	
B-Sand Monitoring Wells																					
MW0005	B-Sand	1,871	34		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWB003	B-Sand	5,615	43		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWB013	B-Sand	5	3	Yes	x	x									x						
MWB014	B-Sand	107	18		x	x									x	x	x				
MWB019	B-Sand	350	23	Yes											x	x					
MWB020	B-Sand	30	12	Yes																	
MWB027	B-Sand	969	30	Yes											x						
TMW_06	B-Sand	79	15		x	x									x	x	x	x	x	x	
TMW_08	B-Sand	1,161	32		x	x									x	x	x	x	x	x	
TMW_10	B-Sand	10	9	Yes	x	x										x					
TMW_11	B-Sand	6	7	Yes												x					
TMW_14	B-Sand	8	8	Yes											x	x					
TMW_15	B-Sand	21	10	Yes	x	x									x						
WCC_03S	B-Sand	13,174	46	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
WCC_09S	B-Sand	51	14	Yes	x	x									x	x	x	x	x	x	
XMW-09	B-Sand	91	17		x	x									x	x	x				
AW0074UB	Upper B-Sand	10,540	45	Yes	x	x									x	x	x	x	x	x	
IRZMW002A	B-Sand	15,302	47		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
IRZMW004	B-Sand	3,784	41		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
				Subtotals	14	15	5	5	5	5	5	5	5	5	16	15	11	9	9	9	
C-Sand Monitoring Wells																					
CMW001	C-Sand	0	1	Yes												x					
CMW002	C-Sand	1,100	15	Yes	x	x									x	x	x				
EWC001	C-Sand	4,432	21		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
IWC001	C-Sand	2,016	19												x	x					
MWC004	C-Sand	101	6	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

AVOCET ENVIRONMENTAL, INC.

Table 2b
Additional Analyses - March 2010 Site-Wide Groundwater Monitoring Event
Boeing Former C-6 Facility
Los Angeles, California

Well ID	Water-Bearing Unit	Total Select VOCs Concentration (µg/l)	Sampling Order	Dedicated Pump?	March 2010 - Additional Analytes																Comments
					SVOCs (incl. 1,4-dioxane and NDMA) (1)	CAM Title 22 Metals	Flashpoint	Cyanides (total)	Sulfides (dissolved)	pH	Temperature	Pesticides/PCBs	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium	pCBSA	Perchlorate	Boron	Anions (NO_3, NO_2, Cl, SO_4) EPA 300.0	Total Dissolved Solids EPA 160.1	
MWC009	C-Sand	164	8	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWC015	C-Sand	757	11		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWC016	C-Sand	1,620	17		x	x									x	x	x	x	x	x	
MWC017	C-Sand	921	13	Yes											x	x					
MWC021	C-Sand	16	4	Yes	x	x									x	x	x				
MWC023	C-Sand	909	12	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
IRZCMW002	C-Sand	1,126	16	Yes	x	x									x	x	x				
IRZCMW003	C-Sand	5,090	22	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
				Subtotals	10	11	6	6	6	6	6	6	6	6	12	13	10	7	7	7	
Gage Monitoring Wells																					
MWG001	Gage	33	1	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWG002	Gage	466	4	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
MWG003	Gage	163	3	Yes	x	x									x	x	x				
MWG004	Gage	44	2	Yes	x	x									x	x	x				
				Subtotals	4	4	2	2	2	2	2	2	2	2	4	4	4	2	2	2	
				Totals	**28**	**30**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**32**	**32**	**25**	**18**	**18**	**18**	

Notes:
SVOCs = semivolatile organic compounds using EPA Method 8270C
(1) Individual SVOCs shall have a reporting limit (RL) of less than (<) 0.01 milligram per liter (mg/L or ppm)
RL for 1,4-dioxane - 3 ppb
RL for NDMA - as low as possible
RL for Perchlorate - 4 ppb
CAM = California Assessment Manual
NDMA = n-nitrosodimethylamine
PCBs = polychlorinated biphenyls
pCBSA = 4-chlorobenzene sulfonic acid

AVOCET ENVIRONMENTAL, INC.

Table 3
Groundwater Elevations
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Date Measured	Reference Elevation[1] (feet amsl)	Depth to Water (feet)[2]	Groundwater Elevation[1] (feet amsl)	Total Depth of Casing (feet)[2]
AW0055UB	03/22/10	53.54	59.92	- 6.38	92
AW0064UB	03/22/10	53.28	58.74	- 5.46	92
AW0073C	03/22/10	53.42	59.97	- 6.55	117
AW0074UB	03/22/10	52.73	59.20	- 6.47	91
AW0075UB	03/22/10	53.23	59.71	- 6.48	93
AW0077UB	03/22/10	53.96	60.50	- 6.54	86
BL-03	03/22/10	58.66	65.75	- 7.09	79
CMW001	03/22/10	54.37	62.18	- 7.81	124
CMW002	03/22/10	52.81	60.72	- 7.91	124
CMW026	03/22/10	51.53	58.87	- 7.34	117
DAC-P1	03/23/10	55.13	61.46	- 6.33	90
EWB002	03/22/10	53.74	60.15	- 6.41	90
EWC001	03/22/10	52.59	59.16	- 6.57	125
IRZB0081	03/22/10	52.92	60.09	- 7.17	89.5
IRZB0095	03/22/10	52.70	59.94	- 7.24	90
IRZCMW001	03/22/10	51.74	59.11	- 7.37	116.4
IRZCMW002	03/22/10	55.60	63.24	- 7.64	121.34
IRZCMW003	03/22/10	51.69	59.05	- 7.36	117.6
IRZMW001A	03/22/10	56.77	64.03	- 7.26	75
IRZMW001B	03/22/10	56.70	64.02	- 7.32	90
IRZMW002A	03/22/10	56.66	63.72	- 7.06	78
IRZMW002B	03/22/10	56.76	63.81	- 7.05	93
IRZMW003A	03/22/10	56.73	63.78	- 7.05	71
IRZMW003B	03/22/10	56.78	63.83	- 7.05	90
IRZMW004	03/22/10	53.06	60.25	- 7.19	90
IRZMW005	03/22/10	52.77	59.91	- 7.14	90
IWC001	03/22/10	53.05	60.61	- 7.56	125
MW0005	03/22/10	52.10	59.07	- 6.97	85
MWB006	03/22/10	53.90	60.14	- 6.24	93
MWB007	03/22/10	51.39	57.81	- 6.42	92
MWB012	03/22/10	52.43	59.47	- 7.04	90.5
MWB013	03/22/10	55.33	61.84	- 6.51	86.5
MWB014	03/22/10	51.69	58.82	- 7.13	86.5
MWB019	03/22/10	55.18	62.62	- 7.44	90.5
MWB020	03/22/10	51.07	56.99	- 5.92	120.5
MWB027	03/22/10	57.14	63.35	- 6.21	91.5
MWC004	03/22/10	51.86	58.63	- 6.77	118
MWC006	03/22/10	54.03	60.36	- 6.33	117.5
MWC007	03/22/10	51.57	57.99	- 6.42	119
MWC009	03/22/10	53.99	61.00	- 7.01	125
MWC011	03/22/10	54.03	60.62	- 6.59	117
MWC015	03/22/10	51.51	59.67	- 8.16	128
MWC016	03/22/10	52.61	60.28	- 7.67	131
MWC017	03/22/10	55.16	63.04	- 7.88	128
MWC021	03/22/10	54.53	61.66	- 7.13	126
MWC022	03/22/10	51.60	58.02	- 6.42	120
MWC023	03/22/10	51.43	58.12	- 6.69	120
MWC024	03/22/10	51.64	59.16	- 7.52	125
MWG001	03/22/10	54.13	62.56	- 8.43	190

AVOCET ENVIRONMENTAL, INC.

Table 3
Groundwater Elevations
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Date Measured	Reference Elevation[1] (feet amsl)	Depth to Water (feet)[2]	Groundwater Elevation[1] (feet amsl)	Total Depth of Casing (feet)[2]
MWG002	03/22/10	54.78	63.62	- 8.84	195
MWG003	03/22/10	53.08	61.44	- 8.36	185
MWG004	03/22/10	52.05	60.62	- 8.57	186
TMW_04	03/22/10	51.39	58.31	- 6.92	80
TMW_06	03/22/10	51.72	58.77	- 7.05	93
TMW_07	03/22/10	53.96	60.60	- 6.64	91
TMW_08	03/22/10	53.98	60.55	- 6.57	81
TMW_10	03/22/10	49.92	56.79	- 6.87	85
TMW_11	03/22/10	49.85	56.98	- 7.13	83
TMW_14	03/22/10	58.91	66.32	- 7.41	90
TMW_15	03/22/10	57.65	64.48	- 6.83	92
WCC_03S	03/22/10	52.80	59.05	- 6.25	92
WCC_04S	03/22/10	52.23	58.80	- 6.57	92
WCC_05S	03/22/10	52.82	59.33	- 6.51	91
WCC_06S	03/22/10	52.52	59.04	- 6.52	91
WCC_07S	03/22/10	52.21	58.78	- 6.57	91
WCC_09S	03/22/10	54.96	61.64	- 6.68	92
WCC_12S	03/22/10	51.32	58.01	- 6.69	92

Notes:
(1) Elevations based on North American Vertical Datum of 1988 (NAVD 88)
(2) Feet below top of casing
feet amsl = feet above mean sea level (negative value indicates feet below mean sea level)

AVOCET ENVIRONMENTAL, INC.

Table 4
Summary of Field Parameters
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Unit	Monitoring Date	pH	Temperature (°C)	Turbidity (NTU)	Electrical Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
AW0055UB	Upper B-Sand	03/25/10	6.61	21.67	5.65	3.16	0.37	-123.2
AW0064UB	Upper B-Sand	03/25/10	7.04	21.95	11.7	1.03	0.25	-149
AW0073C	C-Sand	03/25/10	7.31	21.90	6.18	0.77	0.28	-158.4
AW0074UB	Upper B-Sand	03/25/10	6.57	21.90	7.4	2.33	0.32	-115.4
AW0075UB	Upper B-Sand	03/25/10	6.89	22.16	3.6	2.74	0.30	-134.4
AW0077UB	B-Sand	03/25/10	6.85	21.50	8.6	2.9	0.44	-153.3
BL-03	B-Sand	03/22/10	3.69	22.00	48	2.99	3.63	19.6
CMW001	C-Sand	03/26/10	7.47	21.90	2	0.847	0.59	-29.8
CMW002	C-Sand	03/23/10	7.43	21.41	3	1.041	0.60	56.3
CMW026	C-Sand	03/23/10	6.96	21.36	4	1.641	0.72	-86.1
DAC-P1	B-Sand	03/22/10	6.42	22.00	6.03	1.88	3.18	17.2
EWB001	B-Sand	03/23/10	6.74	21.64	23	3.441	5.03	219.4
EWB002	B-Sand	03/25/10	6.78	21.77	2.61	2.71	0.45	-102.4
EWC001	C-Sand	03/24/10	6.80	22.33	11.2	1.48	0.35	-149.7
IRZB0081	B-Sand	03/25/10	6.80	21.01	1,000	1.7	0.40	-143.6
IRZB0095	B-Sand	03/25/10	6.88	21.42	1,000	1.63	1.22	-993
IRZCMW001	C-Sand	03/23/10	6.81	21.81	2.59	1.26	0.40	-100.3
IRZCMW002	C-Sand	03/23/10	6.33	21.02	3.55	1.9	0.58	-113.2
IRZCMW003	C-Sand	03/23/10	6.60	21.26	3.53	1.26	0.55	-98.1
IRZMW001A	B-Sand	03/24/10	7.13	21.81	11.1	2.54	0.32	-52.6
IRZMW001B	B-Sand	03/24/10	7.07	21.34	3.96	1.77	0.66	15.2
IRZMW002A	B-Sand	03/24/10	7.11	21.73	227	2.45	0.40	-45.6
IRZMW002B	B-Sand	03/24/10	7.12	21.48	7.18	1.69	0.54	-57
IRZMW003A	B-Sand	03/24/10	7.05	21.64	85.3	2.28	0.68	-52.1
IRZMW003B	B-Sand	03/24/10	7.07	21.48	15	1.6	0.41	-92.6
IRZMW004	B-Sand	03/23/10	6.70	22.05	3.27	2.09	0.74	-35.8
IRZMW005	B-Sand	03/23/10	6.78	22.47	7.22	1.81	0.35	-80.4
IWC001	C-Sand	03/24/10	7.46	21.93	54	1.364	2.41	159.8
MW0005	B-Sand	03/24/10	7.56	22.65	61	1.152	5.27	141
MWB003	B-Sand	03/23/10	7.17	22.06	497	2.071	3.24	141
MWB006	B-Sand	03/25/10	5.91	22.94	0.74	8.01	0.12	-119
MWB007	B-Sand	03/25/10	7.37	21.86	3	2.006	3.12	104.9
MWB012	B-Sand	03/24/10	7.87	22.41	4	1.749	4.66	115.3
MWB013	B-Sand	03/26/10	6.90	21.52	2	1.736	5.40	66.7
MWB014	B-Sand	03/24/10	7.52	21.17	5	1.319	3.80	202.8
MWB019	B-Sand	03/26/10	6.63	22.45	0.52	2.98	4.81	-45.3
MWB020	B-Sand	03/25/10	7.15	21.23	3	1.883	3.31	209.2
MWB027	B-Sand	03/25/10	6.73	21.68	3.86	2.08	3.78	-9.2
MWB028	B-Sand	03/23/10	7.24	21.77	490	1.444	4.57	209.6
MWC004	C-Sand	03/25/10	7.67	22.28	3	0.883	0.58	179.2
MWC006	C-Sand	03/22/10	7.39	23.12	355	0.844	1.09	31.7
MWC007	C-Sand	03/22/10	7.26	22.09	2.28	1.058	2.10	-363
MWC009	C-Sand	03/26/10	7.14	21.35	0.64	0.84	0.45	-96.2
MWC011	C-Sand	03/22/10	6.91	22.17	156	1.585	1.09	-5.1
MWC015	C-Sand	03/24/10	7.21	20.50	8	0.896	1.35	9
MWC016	C-Sand	03/24/10	7.59	22.35	7	1.279	2.51	131

AVOCET ENVIRONMENTAL, INC.

Table 4
Summary of Field Parameters
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Unit	Monitoring Date	pH	Temperature (°C)	Turbidity (NTU)	Electrical Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
MWC017	C-Sand	03/26/10	6.97	22.65	1.97	0.88	0.44	-188.1
MWC021	C-Sand	03/26/10	7.73	22.45	2	0.958	0.52	-35.5
MWC022	C-Sand	03/25/10	7.84	22.80	2	0.888	0.61	180.3
MWC023	C-Sand	03/25/10	7.38	22.56	3	1.251	0.49	8.6
MWC024	C-Sand	03/23/10	6.90	22.64	2.32	1.39	0.38	-81
MWG001	Gage	03/26/10	7.99	22.30	3	0.676	0.43	-54.9
MWG002	Gage	03/26/10	7.27	23.17	3.72	0.73	0.42	-215
MWG003	Gage	03/26/10	7.50	21.73	2.98	0.86	0.46	-136.9
MWG004	Gage	03/26/10	7.81	20.45	2.18	0.64	0.53	-120.6
TMW_06	B-Sand	03/24/10	7.76	20.40	81	1.726	4.05	204.6
TMW_07	B-Sand	03/24/10	7.04	21.04	12.2	1.62	5.06	123.8
TMW_08	B-Sand	03/23/10	7.20	22.42	6	2.203	0.63	92.7
TMW_10	B-Sand	03/26/10	7.22	22.42	8	2.417	2.17	103.9
TMW_11	B-Sand	03/26/10	6.70	21.91	4	1.858	3.73	103.8
TMW_14	B-Sand	03/25/10	6.72	21.70	5	2.997	5.30	216.6
TMW_15	B-Sand	03/25/10	7.19	20.58	5	1.615	4.72	213.7
WCC_03S	B-Sand	03/25/10	6.36	22.39	2.03	4.09	0.16	-155
WCC_04S	B-Sand	03/24/10	6.70	23.05	1.98	2.28	2.29	-72.3
WCC_05S	B-Sand	03/22/10	6.88	22.70	1.52	1.53	4.20	1.1
WCC_06S	B-Sand	03/25/10	7.00	22.14	0.37	3.63	6.08	-15.4
WCC_07S	B-Sand	03/25/10	7.42	22.64	3	2.497	4.38	179.9
WCC_09S	B-Sand	03/25/10	7.37	21.28	4	2.003	4.85	190.2
WCC_12S	B-Sand	03/25/10	7.35	20.41	6	1.66	5.25	214.1

Notes:
°C = degrees Celsius
NTU = nephelometric turbidity unit
mS/cm = millisiemen per centimeter
mg/l = milligram per liter
mV = millivolt

AVOCET ENVIRONMENTAL, INC.

Table 5
Summary of Volatile Organic Compound Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-pentanone
AW0073C	C-Sand	03/25/10	Primary	<1	**1**	<1	**2.4**	**45**	**81**	<1	<1 L	<1	<1 C	<1	<2	<1	<1	**7.9**	<1	<1	<1	<1	<1	<1	<6	<1	<5
CMW001	C-Sand	03/26/10	Primary	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	<25	<25	<12	<25	<25	<25	<25	<25	<25	<150	<25	<120
CMW002	C-Sand	03/23/10	Primary	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40 C	<40	<80	<40	<40	<20	<40	<40	<40	<40	<40	<40	<240	<40	<200
CMW026	C-Sand	03/23/10	Primary	<2.5	<2.5	<2.5	<2.5	**5.8**	**1.1 J**	<2.5	<2.5	<2.5	<2.5 C	<2.5	<5	<2.5	<2.5	**1.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<15	<2.5	<12
EWC001	C-Sand	03/24/10	Primary	<10 C,L	**4.9 J**	<10	**8.1 J**	**86**	**3,300**	<10	<10	<10	<10	<10	<20 C	<10	<10	**10**	<10	<10	<10	<10	<10 C,L	<10	<60	<10	<50
IRZCMW001	C-Sand	03/23/10	Primary	<2	<2	<2	**6**	**9.4**	**380**	<2	<2	<2	<2 C	<2	<4	<2	<2	**7.8**	<2	<2	<2	<2	<2	<2	<12	<2	<10
IRZCMW002	C-Sand	03/23/10	Primary	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 C	<5	<10	<5	<5	<2.5	<5	<5	<5	<5	<5	<5	<30	<5	<25
IRZCMW003	C-Sand	03/23/10	Primary	<5	<5	<5	<5	<5	**26**	<5	<5 L	<5	<5 C	<5	<10	<5	<5	<2.5	<5	<5	<5	<5	<5	<5	<30	<5	<25
IWC001	C-Sand	03/24/10	Primary	<4	<4	<4	<4	<4	**14**	<4	<4	<4	<4	<4	<8	<4	<4	<2	<4	<4	<4	<4	<4	<4	<24	<4	<20
MWC004	C-Sand	03/25/10	Primary	<1	<1	<1	**1.4**	**2**	**160**	<1	<1	<1	<1	<1	<2	<1	<1	**1.7**	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC006	C-Sand	03/22/10	Primary	<1	<1	<1	<1	**0.47 J**	**1**	<1	<1	<1	<1 C	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC007	C-Sand	03/22/10	Primary	<1	<1	<1	<1	<1	**6.7**	<1	<1	<1	<1 C	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC009	C-Sand	03/26/10	Primary	<1	<1	<1	**4.4**	**4.1**	**530**	<1	<1	<1	<1	<1	<2	<1	<1	**5.1**	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC011	C-Sand	03/22/10	Primary	<1	<1	<1	<1	**4.5**	**12**	<1	<1	<1	<1 C	<1	<2	<1	<1	**0.68**	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC015	C-Sand	03/24/10	Primary	<2.5	<2.5	<2.5	<2.5	<2.5	**23**	<2.5	<2.5	<2.5	<2.5	<2.5	<5	<2.5	<2.5	<1.2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<15	<2.5	<12
MWC016	C-Sand	03/24/10	Primary	<5	<5	<5	<5	<5	**19**	<5	<5	<5	<5	<5	<10	<5	<5	<2.5	<5	<5	<5	<5	<5	<5	<30	<5	<25
MWC016	C-Sand	03/24/10	Duplicate	<5	<5	<5	<5	<5	**19**	<5	<5	<5	<5	<5	<10	<5	<5	<2.5	<5	<5	<5	<5	<5	<5	<30	<5	<25
MWC017	C-Sand	03/26/10	Primary	<1	<1	<1	<1	<1	**32**	<1	<1	<1	<1	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC021	C-Sand	03/26/10	Primary	<1	<1	<1	<1	**0.75 J**	**0.71 J**	<1	<1	<1	<1	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC022	C-Sand	03/25/10	Primary	<1	<1	<1	<1	<1	**54**	<1	<1 L	<1	<1 C	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC022	C-Sand	03/25/10	Duplicate	<1	<1	<1	<1	<1	**49**	<1	<1 L	<1	<1 C	<1	<2	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<6	<1	<5
MWC023	C-Sand	03/25/10	Primary	<5	**2.1 J**	<5	**3.5 J**	**50**	**2,400**	<5	<5 L	<5	<5 C	<5	<10	<5	<5	**4.3**	<5	<5	<5	<5	<5	<5	<30	<5	<25
MWC024	C-Sand	03/23/10	Primary	<5	<5	<5	<5	**3.6 J**	**72**	<5	<5 L	<5	<5 C	<5	<10	<5	<5	**3.2**	<5	<5	<5	<5	<5	<5	<30	<5	<25
MWC024	C-Sand	03/23/10	Duplicate	<5	<5	<5	<5	**3.8 J**	**78**	<5	<5 L	<5	<5 C	<5	<10	<5	<5	**2.9**	<5	<5	<5	<5	<5	<5	<30	<5	<25

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
C = Cal. verif. recovery greater than MCL for this analyte
J = estimated concentration detected below the laboratory reporting limit
L = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits
M1 = MS and/or MSD were above acceptance limits due to matrix interference
M7 = The MS and/or MSD were above the acceptance limits.
MHA = Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recoveryinformation.

AVOCET ENVIRONMENTAL, INC.

Table 5
Summary of Volatile Organic Compound Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dichlorodifluoromethane	Diisopropyl ether	Ethyl tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene	Iodomethane	Isopropylbenzene
AW0073C	C-Sand	03/25/10	Primary	<10	**2**	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1	<2	**69**	<0.5	<1	<1	**1.6 J**	<2	**0.42 J**	<1	<2	<1
CMW001	C-Sand	03/26/10	Primary	<250	**15**	<25	<25	<25	<25	<25	<25	<12	**6,600**	<50	<25	<50	<25	<12	<25	<25	<50	<50	<25	<25	<50	<25
CMW002	C-Sand	03/23/10	Primary	<400	**92**	<40	<40	<40	<40	<40	<40	<20	**10,000**	<80	<40	<80	<40	<20	<40	<40	<80	<80	<40	<40	<80	<40
CMW026	C-Sand	03/23/10	Primary	<25	<1.2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<1.2	<2.5	<5	<2.5	<5	**2.8**	<1.2	<2.5	<2.5	**0.78 J**	<5	<2.5	<2.5	<5	<2.5
EWC001	C-Sand	03/24/10	Primary	<100	**18**	<10	<10	<10	<10	<10	<10	<5	<10	<20	**4.1 J**	<20	**1,500**	<5	<10	<10	**4.2 J**	<20 C,L	<10	<10	<20	<10
IRZCMW001	C-Sand	03/23/10	Primary	<20	<1	<2	<2	<2	<2	<2	<2	<1	<2	<4	**4.5**	<4	**23**	<1	<2	<2	**1 J**	<4	<2	<2	<4	<2
IRZCMW002	C-Sand	03/23/10	Primary	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	<5	<10	**4.4 J**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5
IRZCMW003	C-Sand	03/23/10	Primary	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**1.9 J**	<10	**830**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5
IWC001	C-Sand	03/24/10	Primary	<40	<2	<4	<4	<4	<4	<4	<4	<2	<4	<8	**400**	<8	**47**	<2	<4	<4	<8	<8	<4	<4	<8	<4
MWC004	C-Sand	03/25/10	Primary	<10	**0.56**	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	**0.51 J**	<2	**7.6**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC006	C-Sand	03/22/10	Primary	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1	<2	**2.2**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC007	C-Sand	03/22/10	Primary	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1	<2	**0.4 J**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC009	C-Sand	03/26/10	Primary	<10	**1.2**	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	**1.5**	<2	**17**	<0.5	<1	<1	**0.42 J**	<2	<1	<1	<2	<1
MWC011	C-Sand	03/22/10	Primary	<10	**1**	<1	<1	<1	<1	<1	<1	<0.5	<1	**7.4**	<1	<2	**14**	<0.5	<1	<1	**0.38 J**	<2	<1	<1	<2	<1
MWC015	C-Sand	03/24/10	Primary	<25	<1.2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<1.2	<2.5	<5	**1.7 J**	<5	**2.6**	<1.2	<2.5	<2.5	<5	<5	<2.5	<2.5	<5	<2.5
MWC016	C-Sand	03/24/10	Primary	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**8.5**	<10	**40**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5
MWC016	C-Sand	03/24/10	Duplicate	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**8.6**	<10	**40**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5
MWC017	C-Sand	03/26/10	Primary	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	**1.1**	<2	**0.76 J**	<2	**340**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC021	C-Sand	03/26/10	Primary	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	**0.38 J**	<2	**4.5**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC022	C-Sand	03/25/10	Primary	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1	<2	**2.6**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC022	C-Sand	03/25/10	Duplicate	<10	<0.5	<1	<1	<1	<1	<1	<1	<0.5	<1	<2	<1	<2	**2.5**	<0.5	<1	<1	<2	<2	<1	<1	<2	<1
MWC023	C-Sand	03/25/10	Primary	<50	**18**	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**3 J**	<10	**720**	<2.5	<5	<5	**3.8 J**	<10	<5	<5	<10	<5
MWC024	C-Sand	03/23/10	Primary	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**18**	<10	**24**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5
MWC024	C-Sand	03/23/10	Duplicate	<50	<2.5	<5	<5	<5	<5	<5	<5	<2.5	<5	<10	**17**	<10	**25**	<2.5	<5	<5	<10	<10	<5	<5	<10	<5

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated.
C = Cal. verif. recovery greater than MCL for this analyte
J = estimated concentration detected below the laboratory reporting limit.
L = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits.
M1 = MS and/or MSD were above acceptance limits due to matrix interference.
M7 = The MS and/or MSD were above the acceptance limits.
MHA = Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recoveryinformation.

AVOCET ENVIRONMENTAL, INC.

Table 5
Summary of Volatile Organic Compound Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	m,p-Xylenes	Methyl ethyl ketone	Methyl tert-butyl ether	Methylene chloride	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	Tert-amyl methyl ether	tert-Butanol (TBA)	tert-Butylbenzene	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride	Xylenes, Total
AW0073C	C-Sand	03/25/10	Primary	**2.9**	<5	<1	<1	<1	<1	**1.2**	<1	<1	<1	<2	<25	<1	<1	<10	**24**	**9.6**	<0.5	**6.1**	<2	<6 L	**240**	**4.1**
CMW001	C-Sand	03/26/10	Primary	<25	<120	<25	<25	<25	<25	<12	<25	<25	<25	<50	<620	<25	<25	<250	<25	<25	<12	<25	<50	<150 L	<12	<25
CMW002	C-Sand	03/23/10	Primary	<40	<200	<40	<40	<40	<40	<20	<40	<40	<40	<80	<1,000	<40	<40	<400	<40	<40	<20	**230**	<80	<240 L	<20	<40
CMW026	C-Sand	03/23/10	Primary	<2.5	<12	<2.5	<2.5	<2.5	<2.5	<1.2	<2.5	<2.5	<2.5	<5	<62	<2.5	<2.5	<25	<2.5	**4.4**	<1.2	**1.1 J**	<5	<15 L	**1,000**	<2.5
EWC001	C-Sand	03/24/10	Primary	<10	<50	<10	<10	<10	<10	<5	<10	<10	<10	<20 C,L	<250	<10	<10	<100	**380**	**93**	<5 C	**200**	<20	<60 L	**1,300**	<10
IRZCMW001	C-Sand	03/23/10	Primary	<2	<10	<2	<2	<2	<2	<1	<2	<2	<2	<4	<50	<2	<2	<20	<2	**2.9**	<1	**710**	<4	<12 L	**2.7**	<2
IRZCMW002	C-Sand	03/23/10	Primary	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	**13**	<2.5	**1.6 J**	<10	<30 L	**2,200**	<5
IRZCMW003	C-Sand	03/23/10	Primary	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	**24**	<2.5	**1,400**	<10	<30 L	**2,100**	<5
IWC001	C-Sand	03/24/10	Primary	<4	<20	<4	<4	<4	<4	<2	<4	<4	<4	<8	<100	<4	<4	<40	<4	**2.2 J**	<2	**1,300**	<8	<24 L	<2	<4
MWC004	C-Sand	03/25/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	**3.2**	<0.5	**80**	<2	<6 L	<0.5	<1
MWC006	C-Sand	03/22/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	<1	<0.5	**2.2**	<2	<6 L	**3**	<1
MWC007	C-Sand	03/22/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	<1	<0.5	**1.2**	<2	<6 L	<0.5	<1
MWC009	C-Sand	03/26/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	**0.79 J**	<10	<1	**9.6**	<0.5	**180**	<2	<6 L	<0.5	<1
MWC011	C-Sand	03/22/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	**4.8**	**5.1**	<0.5	**21**	<2	<6 L,M7	**21**	<1
MWC015	C-Sand	03/24/10	Primary	<2.5	<12	<2.5	<2.5	<2.5	<2.5	<1.2	<2.5	<2.5	<2.5	<5	<62	<2.5	<2.5	<25	<2.5	<2.5	<1.2	**950**	<5	<15 L	<1.2	<2.5
MWC016	C-Sand	03/24/10	Primary	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	<5	<2.5	**1,800**	<10	<30 L	<2.5	<5
MWC016	C-Sand	03/24/10	Duplicate	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	<5	<2.5	**1,800**	<10	<30 L	<2.5	<5
MWC017	C-Sand	03/26/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	**0.56 J**	<10	<1	**6.8**	<0.5	**2.7**	<2	<6 L	**220**	<1
MWC021	C-Sand	03/26/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	<1	<0.5	**12**	**0.5 J**	<6 L	<0.5	<1
MWC022	C-Sand	03/25/10	Primary	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	**0.63 J**	<0.5	**35**	<2	<6 L	<0.5	<1
MWC022	C-Sand	03/25/10	Duplicate	<1	<5	<1	<1	<1	<1	<0.5	<1	<1	<1	<2	<25	<1	<1	<10	<1	**0.58 J**	<0.5	**34**	<2	<6 L	<0.5	<1
MWC023	C-Sand	03/25/10	Primary	**3.5 J**	<25	<5	<5	<5	<5	**2.8**	<5	<5	<5	<10	<120	<5	<5	<50	<5	**57**	<2.5	**450**	<10	<30 L	**9.4**	**6.2**
MWC024	C-Sand	03/23/10	Primary	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	<5	<2.5	**1,900**	<10	<30 L	<2.5	<5
MWC024	C-Sand	03/23/10	Duplicate	<5	<25	<5	<5	<5	<5	<2.5	<5	<5	<5	<10	<120	<5	<5	<50	<5	<5	<2.5	**1,900**	<10	<30 L	<2.5	<5

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
C = Cal. verif. recovery greater than MCL for this analyte
J = estimated concentration detected below the laboratory reporting limit
L = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits
M1 = MS and/or MSD were above acceptance limits due to matrix interference
M7 = The MS and/or MSD were above the acceptance limits.
MHA = Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recoveryinformation.

AVOCET ENVIRONMENTAL, INC.

Table 6
Data Precision for Sample Duplicates
Boeing Former C-6 Facility
Los Angeles, California

Well	Date Collected	Analysis	Compound	Original Sample[1] (µg/l)	Duplicate Sample[1] (µg/l)	Relative Percentage Difference[2] (%)
MWC016	3/24/2010	EPA Method 8260B	1,1-Dichloroethene	19	19	0
			Chloroform	8.5	8.6	1
			cis-1,2-Dichloroethene	40	40	0
			Trichloroethene	1,800	1,800	0
MWC022	03/25/10	EPA Method 8260B	1,1-Dichloroethene	54	49	10
			cis-1,2-Dichloroethene	2.6	2.5	4
			trans-1,2-Dichloroethene	0.63	0.58	8
			Trichloroethene	35	34	3
MWC024	03/23/10	EPA Method 8260B	1,1-Dichloroethane	3.6	3.8	5
			1,1-Dichloroethene	72	78	8
			1,2-Dichloroethane	3.2	2.9	10
			Chloroform	18	17	6
			cis-1,2-Dichloroethene	24	25	4
			Trichloroethene	1,900	1,900	0
WCC_06S	03/25/10	EPA Method 8260B	1,1-Dichloroethane	4	4.2	5
			1,1-Dichloroethene	820	990	19
			Chloroform	1.6	1.9	17
			cis-1,2-Dichloroethene	9.3	10	7
			Tetrachloroethene	4.7	4.8	2
			trans-1,2-Dichloroethene	4.5	5.1	13
			Trichloroethene	640	780	20

Notes:

(1) Primary and duplicate samples analyzed by TestAmerica Laboratories, Inc. using EPA Method 8260B.

(2) Relative percentage difference calculated as:

$$RPD = \frac{|V_1 - V_2|}{(V_1 + V_2)/2} \times 100$$

where V_1 = original sample result.

V_2 = duplicate sample result

AVOCET ENVIRONMENTAL, INC.

Table 7
Summary of Semivolatile Organic Compound Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, CA

Well I.D.	Category	Sample Date	Sample Type	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,2-Diphenylhydrazine	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol
AW0074UB	Upper B-Sand	03/25/10	Primary	<19 RL3	<9.4 RL3	<19 RL3	<9.4 RL3	<9.4 RL3	<38 RL3	<19 RL3	<38 RL3	<38 RL3	<94 RL3	<94 RL3	<94 RL3	<9.4 RL3	<19 RL3	<19 RL3	<94 RL3	<38 RL3
CMW002	C-Sand	03/23/10	Primary	<4.8 RL3	**1.2 J,RL3**	<4.8 RL3	<2.4 RL3	**7.3 RL3**	<9.5 RL3	<4.8 RL3	<9.5 RL3	<9.5 RL3	<24 RL3	<24 RL3	<24 RL3	<2.4 RL3	<4.8 RL3	<4.8 C-2a,RL3	<24 RL3	<9.5 RL3
EWC001	C-Sand	03/24/10	Primary	**0.094 J**	<0.47	<0.94	**0.13 J**	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
IRZCMW002	C-Sand	03/23/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94 C-2a	<4.7	<1.9
IRZCMW003	C-Sand	03/23/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94 C-2a	<4.7	<1.9
IRZMW002A	B-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
IRZMW004	B-Sand	03/23/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94 C-2a	<4.7	<1.9
MW0005	B-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWB003	B-Sand	03/23/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96 C-2a	<4.8	<1.9
MWB013	B-Sand	03/26/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWB014	B-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWC004	C-Sand	03/25/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96	<4.8	<1.9
MWC009	C-Sand	03/26/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96	<4.8	<1.9
MWC015	C-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWC016	C-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWC021	C-Sand	03/26/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWC023	C-Sand	03/25/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
MWG001	Gage	03/26/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96	<4.8	<1.9
MWG002	Gage	03/26/10	Primary	<0.95	<0.48	<0.95	<0.48	<0.48	<1.9	<0.95	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.95	<0.95	<4.8	<1.9
MWG003	Gage	03/26/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96	<4.8	<1.9
MWG004	Gage	03/26/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
TMW_06	B-Sand	03/24/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
TMW_08	B-Sand	03/23/10	Primary	<0.97	<0.49	<0.97	<0.49	<0.49	<1.9	<0.97	<1.9	<1.9	<4.9	<4.9	<4.9	<0.49	<0.97	<0.97 C-2a	<4.9	<1.9
TMW_10	B-Sand	03/26/10	Primary	<0.96	<0.48	<0.96	<0.48	<0.48	<1.9	<0.96	<1.9	<1.9	<4.8	<4.8	<4.8	<0.48	<0.96	<0.96	<4.8	<1.9
TMW_15	B-Sand	03/25/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
WCC_03S	B-Sand	03/25/10	Primary	**0.13 J**	<0.47	<0.94	**0.36 J**	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9
WCC_09S	B-Sand	03/25/10	Primary	<0.94	<0.47	<0.94	<0.47	<0.47	<1.9	<0.94	<1.9	<1.9	<4.7	<4.7	<4.7	<0.47	<0.94	<0.94	<4.7	<1.9

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
B = Lab Qualifier DescriptionAnalyte was detected in the associated Method Blank
C-2 & C-2a = Calibration Verification recovery was below the method control limit for this analyte.
I = Internal Standard recovery was outside of method limits, matrix interference was confirmed, estimated value
J = estimated concentration detected below the laboratory reporting limit
L2 = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits
L6 = Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration
RL3 = Reporting limit raised due to high concentrations of non-target analytes

AVOCET ENVIRONMENTAL, INC.

Well I.D.	Category	Sample Date	Sample Type	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-o-cresol	4-Bromophenyl phenyl ether	4-Chlorophenylphenyl ether	4-Nitrophenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzidine	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Benzoic acid
AW0074UB	Upper B-Sand	03/25/10	Primary	<94 RL3	<94 RL3	<94 RL3	<19 RL3	<9.4 RL3	<94 RL3	<9.4 RL3	<9.4 RL3	<190 RL3	<9.4 RL3	<94 L6,RL3	<94 RL3	<38 RL3	<38 RL3	<94 RL3	<9.4 RL3	**130** J,RL3
CMW002	C-Sand	03/23/10	Primary	<24 L2,RL3	<24 RL3	<24 RL3	<4.8 RL3	<2.4 RL3	<24 RL3	<2.4 RL3	<2.4 RL3	<48 L2,RL3	<2.4 RL3	<24 L6,RL3	<24 RL3	<9.5 RL3	<9.5 RL3	<24 RL3	<2.4 RL3	<95 RL3
EWC001	C-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
IRZCMW002	C-Sand	03/23/10	Primary	<4.7 L2	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4 L2	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
IRZCMW003	C-Sand	03/23/10	Primary	<4.7 L2	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4 L2	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
IRZMW002A	B-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
IRZMW004	B-Sand	03/23/10	Primary	<4.7 L2	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4 L2	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MW0005	B-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWB003	B-Sand	03/23/10	Primary	<4.8 L2	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6 L2	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWB013	B-Sand	03/26/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWB014	B-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWC004	C-Sand	03/25/10	Primary	<4.8	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWC009	C-Sand	03/26/10	Primary	<4.8	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWC015	C-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWC016	C-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWC021	C-Sand	03/26/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWC023	C-Sand	03/25/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
MWG001	Gage	03/26/10	Primary	<4.8	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWG002	Gage	03/26/10	Primary	<4.8	<4.8	<4.8	<0.95	<0.48	<4.8	<0.48	<0.48	<9.5	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWG003	Gage	03/26/10	Primary	<4.8	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
MWG004	Gage	03/26/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
TMW_06	B-Sand	03/24/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
TMW_08	B-Sand	03/23/10	Primary	<4.9 L2	<4.9	<4.9	<0.97	<0.49	<4.9	<0.49	<0.49	<9.7 L2	<0.49	<4.9 L6	<4.9	<1.9	<1.9	<4.9	<0.49	<19
TMW_10	B-Sand	03/26/10	Primary	<4.8	<4.8	<4.8	<0.96	<0.48	<4.8	<0.48	<0.48	<9.6	<0.48	<4.8 L6	<4.8	<1.9	<1.9	<4.8	<0.48	<19
TMW_15	B-Sand	03/25/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19
WCC_03S	B-Sand	03/25/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	**3.6 J**
WCC_09S	B-Sand	03/25/10	Primary	<4.7	<4.7	<4.7	<0.94	<0.47	<4.7	<0.47	<0.47	<9.4	<0.47	<4.7 L6	<4.7	<1.9	<1.9	<4.7	<0.47	<19

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
B = Lab Qualifier DescriptionAnalyte was detected in the associated Method Blank
C-2 & C-2a = Calibration Verification recovery was below the method control limit for this analyte.
I = Internal Standard recovery was outside of method limits, matrix interference was confirmed, estimated value
J = estimated concentration detected below the laboratory reporting limit
L2 = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits
L6 = Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration
RL3 = Reporting limit raised due to high concentrations of non-target analytes

AVOCET ENVIRONMENTAL, INC.

Well I.D.	Category	Sample Date	Sample Type	Benzyl alcohol	bis(2-Chloroethoxy)methane	bis(2-Chloroethyl) ether	bis(2-Chloroisopropyl) ether	bis(2-Ethylhexyl) phthalate	Butyl benzyl phthalate	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	di-n-Octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
AW0074UB	Upper B-Sand	03/25/10	Primary	<94 RL3	<9.4 RL3	<9.4 RL3	<9.4 RL3	<94 RL3	<94 RL3	<9.4 RL3	<9.4 RL3	<9.4 RL3	<19 RL3	<9.4 RL3	<38 RL3	<94 RL3	<9.4 RL3	<9.4 RL3	<19 RL3	<38 RL3	<94 RL3
CMW002	C-Sand	03/23/10	Primary	<24 RL3	<2.4 RL3	<2.4 RL3	<2.4 RL3	<24 RL3	<24 RL3	<2.4 RL3	<2.4 RL3	<2.4 RL3	**1.1 B,J,RL3**	<2.4 RL3	<9.5 RL3	<24 RL3	<2.4 RL3	<2.4 RL3	<4.8 RL3	<9.5 RL3	<24 RL3
EWC001	C-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.11 J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
IRZCMW002	C-Sand	03/23/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.3 B,J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
IRZCMW003	C-Sand	03/23/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.23 B,J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
IRZMW002A	B-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
IRZMW004	B-Sand	03/23/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.58 B,J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MW0005	B-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWB003	B-Sand	03/23/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	**0.33 B,J**	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
MWB013	B-Sand	03/26/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWB014	B-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWC004	C-Sand	03/25/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.96	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
MWC009	C-Sand	03/26/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.96	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
MWC015	C-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.19 J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWC016	C-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWC021	C-Sand	03/26/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWC023	C-Sand	03/25/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
MWG001	Gage	03/26/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.96	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
MWG002	Gage	03/26/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.95	<0.48	<1.9	<4.8	<0.48	<0.48	<0.95	<1.9	<4.8
MWG003	Gage	03/26/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.96	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
MWG004	Gage	03/26/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
TMW_06	B-Sand	03/24/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	**0.11 J**	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
TMW_08	B-Sand	03/23/10	Primary	<4.9	<0.49	<0.49	<0.49	<4.9	<4.9	<0.49	<0.49	<0.49	**0.29 B,J**	<0.49	<1.9	<4.9	<0.49	<0.49	<0.97	<1.9	<4.9
TMW_10	B-Sand	03/26/10	Primary	<4.8	<0.48	<0.48	<0.48	<4.8	<4.8	<0.48	<0.48	<0.48	<0.96	<0.48	<1.9	<4.8	<0.48	<0.48	<0.96	<1.9	<4.8
TMW_15	B-Sand	03/25/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
WCC_03S	B-Sand	03/25/10	Primary	**0.96 J**	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7
WCC_09S	B-Sand	03/25/10	Primary	<4.7	<0.47	<0.47	<0.47	<4.7	<4.7	<0.47	<0.47	<0.47	<0.94	<0.47	<1.9	<4.7	<0.47	<0.47	<0.94	<1.9	<4.7

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
B = Lab Qualifier DescriptionAnalyte was detected in the associated Method Blank
C-2 & C-2a = Calibration Verification recovery was below the method control limit for this analyte.
I = Internal Standard recovery was outside of method limits, matrix interference was confirmed, estimated value
J = estimated concentration detected below the laboratory reporting limit
L2 = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits
L6 = Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration
RL3 = Reporting limit raised due to high concentrations of non-target analytes

AVOCET ENVIRONMENTAL, INC.

Well I.D.	Category	Sample Date	Sample Type	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Naphthalene	Nitrobenzene	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	o-Cresol	p-Chloroaniline	p-Chloro-m-cresol	p-Cresol	Pentachlorophenol	Phenanthrene	Phenol	p-Nitroaniline	Pyrene	Total Detected SVOCs
AW0074UB	Upper B-Sand	03/25/10	Primary	<57 RL3	<38 RL3	<19 RL3	<19 RL3	<19 RL3	<38 RL3	<19 RL3	**7.2 J,RL3**	<38 RL3	<38 RL3	**85 J,RL3**	<38 RL3	<9.4 RL3	<19 RL3	<94 RL3	<9.4 RL3	**13**
CMW002	C-Sand	03/23/10	Primary	<14 RL3	<9.5 RL3	<4.8 C-2,RL3	<4.8 RL3	<4.8 RL3	<9.5 RL3	<4.8 RL3	<9.5 RL3	<9.5 L2,RL3	<9.5 RL3	<24 RL3	<9.5 RL3	<2.4 RL3	<4.8 RL3	<24 RL3	<2.4 RL3	**7.3**
EWC001	C-Sand	03/24/10	Primary	<2.8	<1.9	**0.11 J**	<0.94	<0.94	<1.9	<0.94	**0.68 J**	<1.9	<1.9	**0.79 J**	<1.9	<0.47	<0.94	<4.7	<0.47	<1
IRZCMW002	C-Sand	03/23/10	Primary	<2.8	<1.9	<0.94 C-2	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9 L2	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
IRZCMW003	C-Sand	03/23/10	Primary	<2.8	<1.9	<0.94 C-2	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9 L2	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
IRZMW002A	B-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
IRZMW004	B-Sand	03/23/10	Primary	<2.8	<1.9	<0.94 C-2	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9 L2	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MW0005	B-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWB003	B-Sand	03/23/10	Primary	<2.9	<1.9	<0.96 C-2	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9 L2	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
MWB013	B-Sand	03/26/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWB014	B-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWC004	C-Sand	03/25/10	Primary	<2.9	<1.9	<0.96	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
MWC009	C-Sand	03/26/10	Primary	<2.9	<1.9	<0.96	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
MWC015	C-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWC016	C-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWC021	C-Sand	03/26/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWC023	C-Sand	03/25/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
MWG001	Gage	03/26/10	Primary	<2.9	<1.9	<0.96	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
MWG002	Gage	03/26/10	Primary	<2.9	<1.9	<0.95	**0.13 J**	<0.95	<1.9	<0.95	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.95	<4.8	<0.48	<1
MWG003	Gage	03/26/10	Primary	<2.9	<1.9	<0.96	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
MWG004	Gage	03/26/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
TMW_06	B-Sand	03/24/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
TMW_08	B-Sand	03/23/10	Primary	<2.9	<1.9	<0.97 C-2	<0.97	<0.97	<1.9	<0.97	<1.9	<1.9 L2	<1.9	<4.9	<1.9	<0.49	<0.97	<4.9	<0.49	<1
TMW_10	B-Sand	03/26/10	Primary	<2.9	<1.9	<0.96	<0.96	<0.96	<1.9	<0.96	<1.9	<1.9	<1.9	<4.8	<1.9	<0.48	<0.96	<4.8	<0.48	<1
TMW_15	B-Sand	03/25/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1
WCC_03S	B-Sand	03/25/10	Primary	<2.8	<1.9	<0.94	**0.3 J**	<0.94	<1.9	<0.94	**5.9**	<1.9	<1.9	**8.2**	<1.9	<0.47	**0.81** J	<4.7	<0.47	**14**
WCC_09S	B-Sand	03/25/10	Primary	<2.8	<1.9	<0.94	<0.94	<0.94	<1.9	<0.94	<1.9	<1.9	<1.9	<4.7	<1.9	<0.47	<0.94	<4.7	<0.47	<1

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
B = Lab Qualifier DescriptionAnalyte was detected in the associated Method Blank
C-2 & C-2a = Calibration Verification recovery was below the method control limit for this analyte.
I = Internal Standard recovery was outside of method limits, matrix interference was confirmed, estimated value
J = estimated concentration detected below the laboratory reporting limit
L2 = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits
L6 = Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration
RL3 = Reporting limit raised due to high concentrations of non-target analytes

AVOCET ENVIRONMENTAL, INC.

Table 8
Summary of Pesticides and PCB Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	Aroclor 1016	Aroclor 1254	beta-Benzenehexachloride	Chlordane	delta-BHC	Dieldrin	Endosulfan sulfate	Endosulfan-I	Endosulfan-II	Endrin	Endrin aldehyde	Endrin ketone	HCH-gamma	Heptachlor	Heptachlor epoxide	p,p'-Methoxychlor	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1260	Toxaphene
EWC001	C-Sand	03/24/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.8
IRZCMW003	C-Sand	03/23/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95 C	<4.8
IRZMW002A	B-Sand	03/24/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.8
IRZMW004	B-Sand	03/23/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95 C	<4.8
MW0005	B-Sand	03/24/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.7
MWB003	B-Sand	03/23/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95 C	<4.8
MWC004	C-Sand	03/25/10	Primary	<0.096	<0.096	<0.096	<0.096	<0.096	<0.96	<0.96	<0.096	<0.96	<0.19	<0.096	<0.19	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.96	<0.96	<0.96	<0.96	<0.96	<4.8
MWC009	C-Sand	03/26/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.8
MWC015	C-Sand	03/24/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.7
MWC023	C-Sand	03/25/10	Primary	<0.097	<0.097	<0.097	<0.097	<0.097	<0.97	<0.97	<0.097	<0.97	<0.19	<0.097	<0.19	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.97	<0.97	<0.97	<0.97	<0.97	<4.9
MWG001	Gage	03/26/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.8
MWG002	Gage	03/26/10	Primary	<0.096	<0.096	<0.096	<0.096	<0.096	<0.96	<0.96	<0.096	<0.96	<0.19	<0.096	<0.19	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.96	<0.96	<0.96	<0.96	<0.96	<4.8
WCC_03S	B-Sand	03/25/10	Primary	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.095	<0.95	<0.19	<0.095	<0.19	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.95	<0.95	<0.95	<0.95	<0.95	<4.7

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
C = Cal. verif. recovery greater than MCL for this analyte

AVOCET ENVIRONMENTAL, INC.

Table 9

Summary of Metals and Hexavalent Chromium Analytical Results

(Units are mg/l)

Boeing Former C-6 Facility

Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Hexavalent chromium
AW0074UB	Upper B-Sand	03/25/10	Primary	<0.01	**0.11**	**0.32**	<0.002	**0.15**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0077 J**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.02**	<0.002
CMW002	C-Sand	03/23/10	Primary	<0.01	<0.01	**0.06**	<0.002	--	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.01	**0.032**	<0.01	**0.0077 J**	<0.01	<0.02	<0.002
EWC001	C-Sand	03/24/10	Primary	<0.01	**0.073**	**0.17**	<0.002	**0.14**	<0.005	**0.0021 J**	<0.01	**0.0063 J**	<0.005	<0.0002	**0.0046 J**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.065**	<0.002
IRZCMW002	C-Sand	03/23/10	Primary	<0.01	<0.01	**0.3**	<0.002	--	<0.005	<0.005	<0.01	<0.01	**0.0041 J**	<0.0002	<0.02	**0.004 J**	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
IRZCMW003	C-Sand	03/23/10	Primary	<0.01	<0.01	**0.14**	<0.002	**0.18**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.01	**0.037**	<0.01	<0.01	<0.01	<0.02	<0.002
IRZMW002A	B-Sand	03/24/10	Primary	<0.01	<0.01	**0.37**	<0.002	**0.21**	<0.005	**0.0034 J**	**0.0027 J**	**0.0035 J**	<0.005	<0.0002	<0.02	**0.0023 J**	**0.052**	<0.01	**0.016**	**0.0052 J**	**0.044**	<0.002
IRZMW004	B-Sand	03/23/10	Primary	<0.01	<0.01	**0.37**	<0.002	**0.15**	<0.005	<0.005	**0.0036 J**	<0.01	**0.0042 J**	<0.0002	<0.02	<0.01	**0.023**	<0.01	<0.01	<0.01	<0.02	**0.0014 J**
IWC001	C-Sand	03/24/10	Primary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.023**
MW0005	B-Sand	03/24/10	Primary	<0.01	<0.01	**0.11**	<0.002	**0.1**	<0.005	**0.012**	<0.01	**0.0035 J**	**0.0066**	**0.00015 J**	<0.02	<0.01	**0.024**	<0.01	**0.012**	**0.0075 J**	**0.028**	**0.0084**
MWB003	B-Sand	03/23/10	Primary	<0.01	<0.01	**0.1**	<0.002	**0.12**	<0.005	**0.014**	**0.0033 J**	**0.0059 J**	<0.005	<0.0002	**0.002 J**	**0.0023 J**	<0.01	<0.01	<0.01	**0.0075 J**	**0.013 J**	**0.012**
MWB013	B-Sand	03/26/10	Primary	<0.01	<0.01	**0.032**	<0.002	--	<0.005	**0.0099**	<0.01	<0.01	<0.005	<0.0002	**0.014 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	**0.0098**
MWB014	B-Sand	03/24/10	Primary	<0.01	<0.01	**0.19**	<0.002	--	<0.005	**0.012**	<0.01	<0.01	<0.005	<0.0002	**0.0045 J**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0081 J**	**0.013**
MWB019	B-Sand	03/26/10	Primary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.013**
MWB027	B-Sand	03/25/10	Primary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.034**
MWC004	C-Sand	03/25/10	Primary	<0.01	<0.01	**0.064**	<0.002	**0.12**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0036 J**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.01 J**	**0.0003 J**
MWC009	C-Sand	03/26/10	Primary	<0.01	<0.01	**0.074**	<0.002	**0.15**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0046 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	**0.0008 J**
MWC015	C-Sand	03/24/10	Primary	<0.01	<0.01	**0.1**	<0.002	**0.14**	<0.005	**0.009**	<0.01	<0.01	<0.005	<0.0002	**0.0039 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	**0.0078**
MWC016	C-Sand	03/24/10	Primary	<0.01	<0.01	**0.18**	<0.002	**0.26**	<0.005	**0.0091**	<0.01	<0.01	<0.005	<0.0002	**0.0045 J**	<0.01	<0.01	<0.01	<0.01	**0.0034 J**	<0.02	**0.0097**
MWC017	C-Sand	03/26/10	Primary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.002
MWC021	C-Sand	03/26/10	Primary	<0.01	<0.01	**0.12**	<0.002	--	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0067 J**	<0.01	**0.019**	<0.01	<0.01	**0.0046 J**	**0.0061 J**	**0.0012 J**
MWC023	C-Sand	03/25/10	Primary	<0.01	<0.01	**0.091**	<0.002	**0.12**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0032 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
MWG001	Gage	03/26/10	Primary	<0.01	<0.01	**0.076**	<0.002	**0.15**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0089 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
MWG002	Gage	03/26/10	Primary	<0.01	<0.01	**0.032**	<0.002	**0.12**	<0.005	<0.005	<0.01	<0.01	**0.0064**	<0.0002	**0.006 J**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.03**	<0.002
MWG003	Gage	03/26/10	Primary	<0.01	<0.01	**0.11**	<0.002	--	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0054 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
MWG004	Gage	03/26/10	Primary	<0.01	<0.01	**0.047**	<0.002	--	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	**0.0066 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
TMW_06	B-Sand	03/24/10	Primary	<0.01	<0.01	**0.18**	<0.002	**0.13**	<0.005	**0.021**	<0.01	<0.01	<0.005	<0.0002	**0.0043 J**	<0.01	<0.01	<0.01	<0.01	**0.0033 J**	**0.026**	**0.021**
TMW_08	B-Sand	03/23/10	Primary	<0.01	<0.01	**0.1**	<0.002	**0.13**	<0.005	**0.0029 J**	<0.01	**0.0044 J**	<0.005	<0.0002	**0.0039 J**	<0.01	**0.055**	<0.01	<0.01	<0.01	**0.0063 J**	<0.002
TMW_10	B-Sand	03/26/10	Primary	<0.01	<0.01	**0.23**	<0.002	--	<0.005	**0.009**	<0.01	<0.01	<0.005	<0.0002	**0.0062 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	--
TMW_14	B-Sand	03/25/10	Primary	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.012**
TMW_15	B-Sand	03/25/10	Primary	<0.01	<0.01	**0.099**	<0.002	--	<0.005	**0.012**	<0.01	<0.01	<0.005	<0.0002	**0.0052 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	**0.014**
WCC_03S	B-Sand	03/25/10	Primary	<0.01	**0.02**	**0.45**	<0.002	**0.19**	<0.005	<0.005	<0.01	<0.01	<0.005	<0.0002	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.002
WCC_09S	B-Sand	03/25/10	Primary	<0.01	<0.01	**0.3**	<0.002	**0.17**	<0.005	**0.015**	<0.01	<0.01	<0.005	<0.0002	**0.005 J**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	**0.017**

Notes:

Bold type indicates detectable concentration.

< = not detected at a concentration greater than the laboratory reporting limit indicated

-- = not analyzed

J = estimated concentration detected below the laboratory reporting limit

AVOCET ENVIRONMENTAL, INC.

Table 10
Summary of 1,4-Dioxane, NDMA, Perchlorate, and pCBSA Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	1,4-Dioxane	n-Nitrosodimethylamine	Perchlorate	4-Chlorobenzenesulfonic acid
AW0074UB	Upper B-Sand	03/25/10	Primary	**13**	<0.0019	<4	<10
CMW001	C-Sand	03/26/10	Primary	--	--	--	**30,000**
CMW002	C-Sand	03/23/10	Primary	**0.35 I,J**	**0.00077 J**	<800 RL1	**44,000**
EWC001	C-Sand	03/24/10	Primary	**0.79 J**	<0.0019	<4	<10
IRZCMW002	C-Sand	03/23/10	Primary	<2.8	<0.0019	<4	<10
IRZCMW003	C-Sand	03/23/10	Primary	<2.8	<0.0019	<4	<10
IRZMW002A	B-Sand	03/24/10	Primary	**1.1 L2,J**	<0.0019	**1.3 J**	<10
IRZMW004	B-Sand	03/23/10	Primary	<2.8	<0.0019	**4.1**	<10
IWC001	C-Sand	03/24/10	Primary	--	--	--	<10
MW0005	B-Sand	03/24/10	Primary	**1.4 J**	<0.0019	**0.98 J**	<10
MWB003	B-Sand	03/23/10	Primary	**0.8 J**	<0.0019	**2.3 J**	<10
MWB013	B-Sand	03/26/10	Primary	**0.22 J**	<0.0019	--	--
MWB014	B-Sand	03/24/10	Primary	<2.9	<0.0019	**2 J**	<10
MWB019	B-Sand	03/26/10	Primary		--	--	<10
MWC004	C-Sand	03/25/10	Primary	**0.51 J**	<0.0019	<4	<10
MWC009	C-Sand	03/26/10	Primary	**0.59 J**	<0.0019	**1 J**	<10
MWC015	C-Sand	03/24/10	Primary	<2.8	<0.0019	**1.3 J**	<10
MWC016	C-Sand	03/24/10	Primary	**0.42 J**	<0.0019	**3.4 J**	<10
MWC017	C-Sand	03/26/10	Primary	--	--	--	**11**
MWC021	C-Sand	03/26/10	Primary	**2.6 J**	<0.0019	**1.3 J**	<10
MWC023	C-Sand	03/25/10	Primary	**0.13 J**	<0.0019	<4	<10
MWG001	Gage	03/26/10	Primary	**0.12 J**	<0.0019	<4	<10
MWG002	Gage	03/26/10	Primary	<2.9	<0.0019	<4	<10
MWG003	Gage	03/26/10	Primary	**0.13 J**	<0.0019	<4	<10
MWG004	Gage	03/26/10	Primary	<2.8	<0.0019	<4	<10
TMW_06	B-Sand	03/24/10	Primary	<2.8	<0.0019	**3.3 J**	<10
TMW_08	B-Sand	03/23/10	Primary	<2.9	<0.0019	**2.9 J**	<10
TMW_10	B-Sand	03/26/10	Primary	<2.8	<0.0019	--	<10
TMW_11	B-Sand	03/26/10	Primary	--	--	--	<10
TMW_14	B-Sand	03/25/10	Primary	--	--	--	<10
TMW_15	B-Sand	03/25/10	Primary	**0.09 J**	<0.0019	--	--
WCC_03S	B-Sand	03/25/10	Primary	**0.76 J**	<0.0019	<4	<10
WCC_09S	B-Sand	03/25/10	Primary	**0.16 J**	<0.0019	**2.7 J**	<10

Notes:

Bold type indicates detectable concentration.

< = not detected at a concentration greater than the laboratory reporting limit indicated

- - = not analyzed

I = Internal Standard recovery was outside of method limits, matrix interference was confirmed, estimated value

J = estimated concentration detected below the laboratory reporting limit

L2 = Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was below acceptance limits

RL1 = Reporting limit raised due to sample matrix effects

AVOCET ENVIRONMENTAL, INC.

Table 11
Summary of Inorganic Analytical Results
(Units are mg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	Flammability (degrees C)	Chloride	Nitrite	Nitrate-NO3	Sulfate	Total dissolved solids	Total suspended solids	Chemical Oxygen Demand	Sulfide, dissolved	Cyanides
AW0074UB	Upper B-Sand	03/25/10	Primary	--	**430 MHA**	<10 RL1	**1.7**	**6.8**	**1,800**	--	--	--	--
CMW002	C-Sand	03/23/10	Primary	--	**140**	--	--	--	**680**	--	--	--	--
CMW026	C-Sand	03/23/10	Primary	--	**230**	<5 RL1	<0.5	**19**	--	--	--	--	--
EWC001	C-Sand	03/24/10	Primary	>94	**300**	<5 RL1	**0.39 J**	**17**	**790**	**12**	<20	**0.039 HFT,J**	<0.025
IRZCMW001	C-Sand	03/23/10	Primary	--	**230**	--	--	--	**820**	--	--	--	--
IRZCMW002	C-Sand	03/23/10	Primary	--	**200**	<0.5	<0.5	**0.7**	--	--	--	--	--
IRZCMW003	C-Sand	03/23/10	Primary	>94	**140**	<2.5 RL1	**0.88**	**38**	**720**	**6 J**	<20	**0.03 HFT,J**	<0.025
IRZMW002A	B-Sand	03/24/10	Primary	>94	**420**	<5 RL1	**4.9**	**52**	**1,300**	**49**	<20	**0.027 HFT,J**	<0.025
IRZMW004	B-Sand	03/23/10	Primary	>94	**410**	<10 RL1	**13**	**24**	**1,600**	**7 J**	<20	**0.023 HFT,J**	<0.025
MW0005	B-Sand	03/24/10	Primary	>94	**220**	<5 RL1	**12**	**35**	**580**	**18**	<20	**0.042 HFT,J**	<0.025
MWB003	B-Sand	03/23/10	Primary	>94	**420**	<10 RL1	**10**	**35**	**1,600**	**70**	<20	<0.1 HFT	<0.025
MWC004	C-Sand	03/25/10	Primary	>94	**140**	<0.5	**4.1**	**30**	**500**	**2 J**	<20	**0.041 HFT,J**	<0.025
MWC009	C-Sand	03/26/10	Primary	>94	**110**	<0.5	**8.5**	**30**	**460**	**1 J**	<20	**0.053 HFT,J**	<0.025
MWC015	C-Sand	03/24/10	Primary	>94	**140**	<0.5	**7.7**	**31**	**410**	**6 J**	<20	**0.024 HFT,J**	<0.025
MWC016	C-Sand	03/24/10	Primary	--	**190**	<5 RL1	**20**	**70**	**630**	--	--	--	--
MWC023	C-Sand	03/25/10	Primary	>94	**240**	<10 RL1	<0.5	**23**	**860**	**2 J**	<20	**0.034 HFT,J**	<0.025
MWG001	Gage	03/26/10	Primary	>94	**74**	<0.5	<0.5	**30**	**360**	**1 J**	<20	**0.025 HFT,J**	<0.025
MWG002	Gage	03/26/10	Primary	>94	**86**	<0.5	<0.5	**37**	**400**	**4 J**	<20	**0.61 HFT**	<0.025
TMW_06	B-Sand	03/24/10	Primary	--	**330**	<5 RL1	**38**	**84**	**930**	--	--	--	--
TMW_08	B-Sand	03/23/10	Primary	--	**470**	<10 RL1	**7.3**	**22**	**1,600**	--	--	--	--
WCC_03S	B-Sand	03/25/10	Primary	>94	**1,000**	<10 RL1	**1**	**29**	**3,100**	**25**	**61**	**0.067 HFT,J**	<0.025
WCC_09S	B-Sand	03/25/10	Primary	--	**410**	<10 RL1	**17**	**86**	**1,400**	--	--	--	--

Notes:
Bold type indicates detectable concentration
< = not detected at a concentration greater than the laboratory reporting limit indicated
- - = not analyzed
HFT = The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
J = estimated concentration detected below the laboratory reporting limi
MHA = Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recoveryinformation.
RL1 = Reporting limit raised due to sample matrix effects

AVOCET ENVIRONMENTAL, INC.

Table 12
Summary of Dissolved Hydrocarbon Gases Analytical Results
(Units are µg/l)
Boeing Former C-6 Facility
Los Angeles, California

Well I.D.	Category	Sample Date	Sample Type	Ethane	Ethylene	Methane
AW0055UB	Upper B-Sand	03/25/10	Primary	**1.3**	**1,100**	**13,000**
AW0064UB	Upper B-Sand	03/25/10	Primary	**0.74 J**	**550**	**9,700**
AW0073C	C-Sand	03/25/10	Primary	<1	**13**	**30**
AW0074UB	Upper B-Sand	03/25/10	Primary	<1	**340**	**26**
AW0075UB	Upper B-Sand	03/25/10	Primary	<1	**530**	**10,000**
AW0077UB	B-Sand	03/25/10	Primary	**1.4**	**360**	**11,000**
CMW002	C-Sand	03/23/10	Primary	<1	<1	**1.9**
CMW026	C-Sand	03/23/10	Primary	<1	**9.2**	**20,000**
EWB002	B-Sand	03/25/10	Primary	**1**	**280**	**13,000**
IRZB0081	B-Sand	03/25/10	Primary	<1	**370**	**5,000**
IRZB0095	B-Sand	03/25/10	Primary	<1	**6.9**	**4,500**
IRZCMW001	C-Sand	03/23/10	Primary	<1	**0.75 J**	**4,900**
IRZCMW002	C-Sand	03/23/10	Primary	<1	**93**	**22,000**
IRZCMW003	C-Sand	03/23/10	Primary	<1	**70**	**22,000**
IRZMW001A	B-Sand	03/24/10	Primary	<1	**0.92 J**	**8,800**
IRZMW001B	B-Sand	03/24/10	Primary	<1	<1	**9,300**
IRZMW002A	B-Sand	03/24/10	Primary	<1	**3.3**	**3,400**
IRZMW002B	B-Sand	03/24/10	Primary	<1	**4**	**7,600**
IRZMW003A	B-Sand	03/24/10	Primary	<1	<1	**7,000**
IRZMW003B	B-Sand	03/24/10	Primary	<1	<1	**2,800**
IRZMW004	B-Sand	03/23/10	Primary	<1	**8.8**	**290**
IRZMW005	B-Sand	03/23/10	Primary	<1	**21**	**1,900**
MWB003	B-Sand	03/23/10	Primary	<1	<1	<1
MWB006	B-Sand	03/25/10	Primary	**1**	**940**	**640**
MWB012	B-Sand	03/24/10	Primary	<1	<1	<1
MWB020	B-Sand	03/25/10	Primary	<1	<1	<1
MWB027	B-Sand	03/25/10	Primary	<1	<1	**0.51 J**
MWC024	C-Sand	03/23/10	Primary	<1	<1	**3,300**
TMW_15	B-Sand	03/25/10	Primary	<1	<1	<1
WCC_03S	B-Sand	03/25/10	Primary	<1	**18**	**1.4**
WCC_04S	B-Sand	03/24/10	Primary	<1	<1	**0.84 J**
WCC_07S	B-Sand	03/25/10	Primary	<1	<1	<1

Notes:
Bold type indicates detectable concentration.
< = not detected at a concentration greater than the laboratory reporting limit indicated
J = estimated concentration detected below the laboratory reporting limit

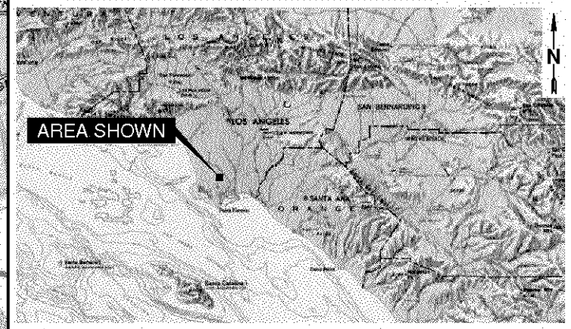
AVOCET ENVIRONMENTAL, INC.

Figures

AVOCET
ENVIRONMENTAL, INC.

V:\1155 Boeing Former C-6\1155.012 1st Q 2010 GW Soil Vapor Mon Reporting\001 1155.012 Site Location Map\05/10/10

BOEING FORMER
C-6 FACILITY



SITE VICINITY MAP

NOT TO SCALE

REFERENCE:
7.5 MINUTE U.S.G.S. TOPOGRAPHIC
MAP OF TORRANCE, CALIFORNIA
DATED: 1964
PHOTOREVISED: 1981

0 2000 4000 FEET
APPROXIMATE
SCALE

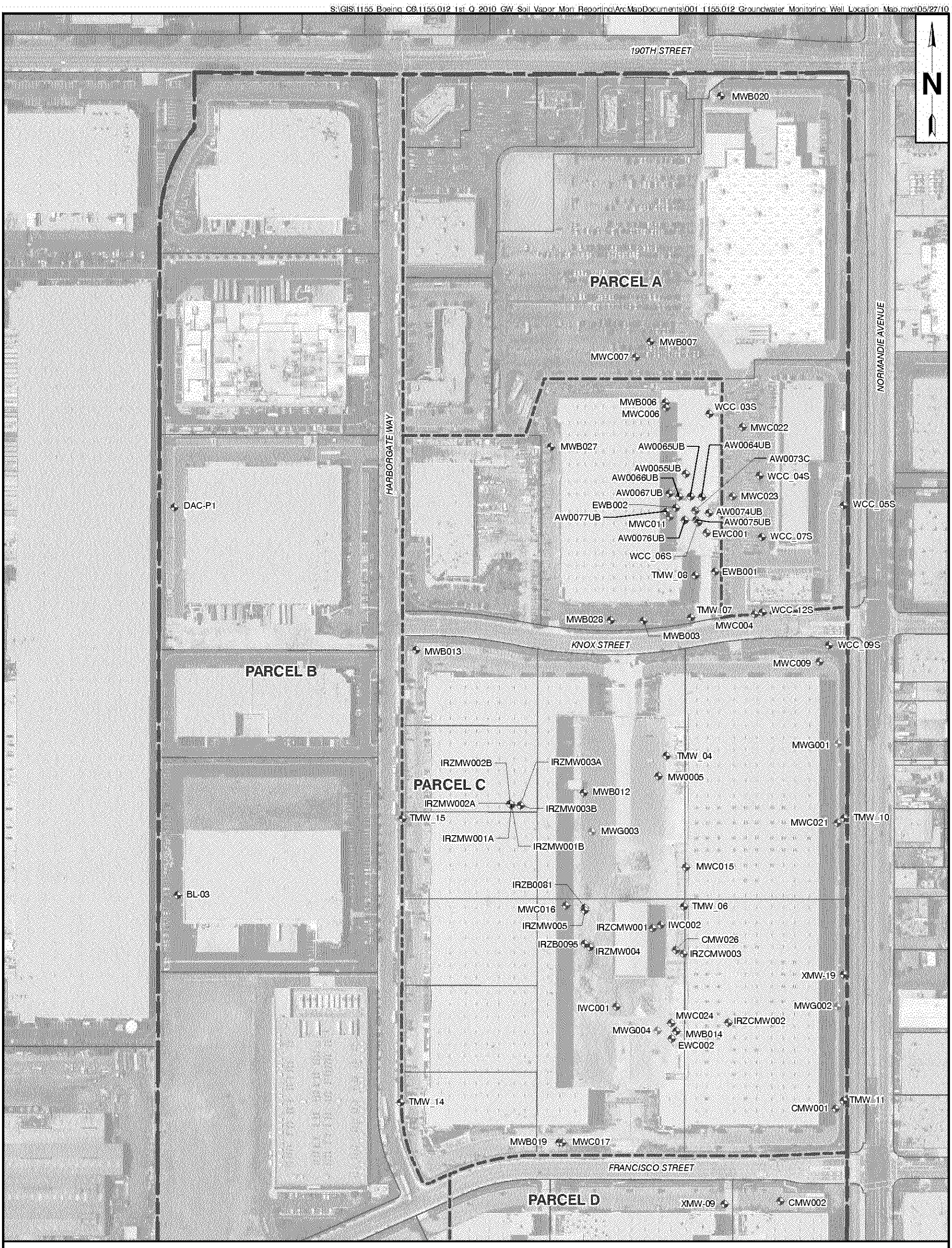
FIGURE 1

SITE LOCATION MAP

THE BOEING COMPANY
FORMER C-6 FACIITY
LOS ANGELES, CALIFORNIA

AVOCET
ENVIRONMENTAL, INC.

S:\GIS\1155 Boeing C6\1155.012 1st Q 2010 GW Soil Vapor Mon Reporting\ArcMapDocuments\001 1155.012 Groundwater Monitoring Well Location Map.mxd\05/27/10



LEGEND

- B-Sand Monitoring Well
- C-Sand Monitoring Well
- Gage Monitoring Well
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

0 250 500

SCALE

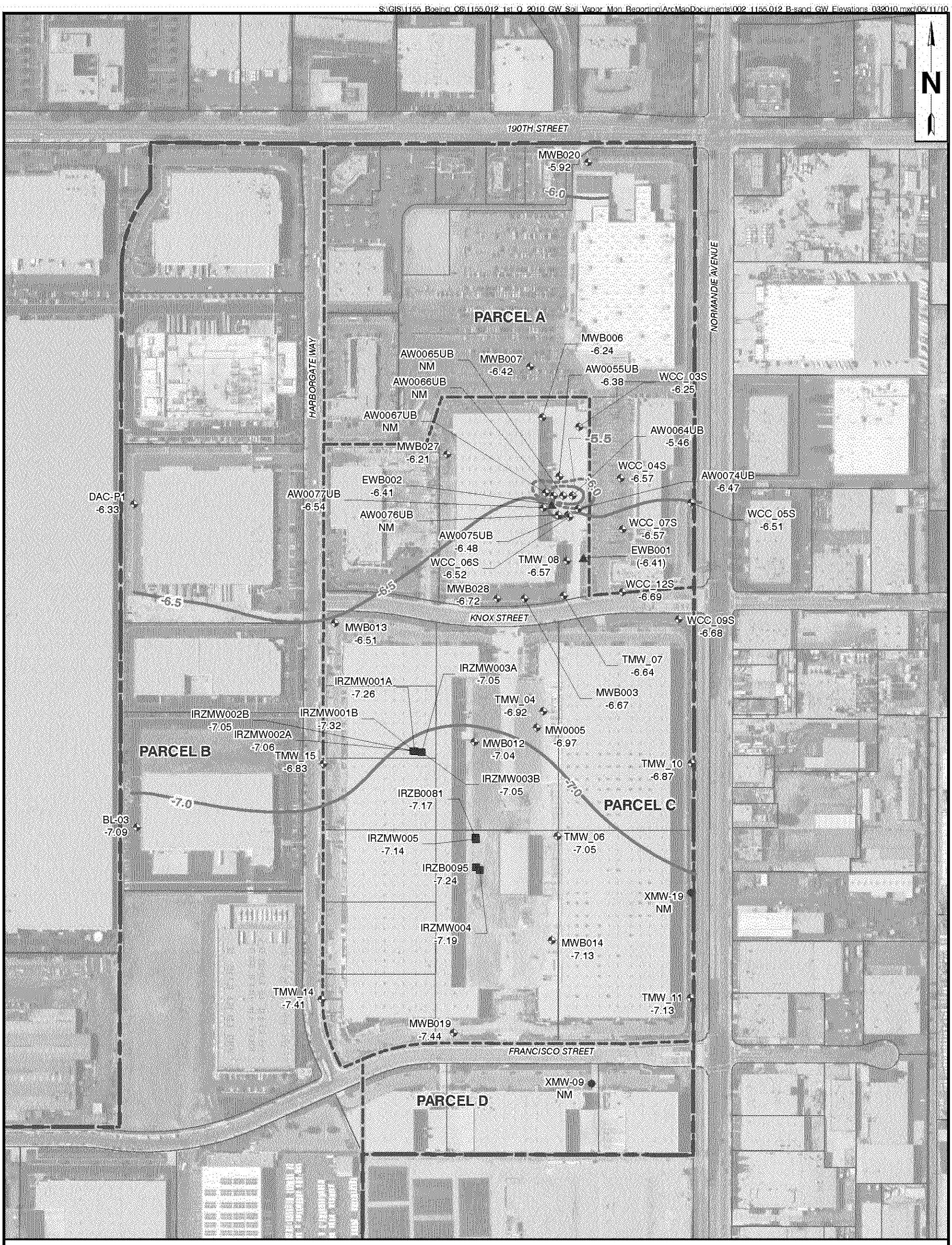
FIGURE 2

GROUNDWATER MONITORING WELL LOCATION MAP

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1155_Boeing_C6\1155.012_1st_Q_2010_GW_Soil_Vapor_Mon_Reporting\ArcMapDocuments\002_1155.012_B-sand_GW_Elevations_032010.mxd\05/11/10



LEGEND

- B-Sand IRZ Bioremediation Monitoring Well
- B-Sand Montrose Monitoring Well
- B-Sand Monitoring Well
- B-Sand Observation Well
- -6.51 — Approximate Water Level Elevation, Feet Mean Sea Level, NM Indicates That The Water Level Was Not Measured.
- (-6.41) — Indicates Water Level Elevation Not Used in Contouring
- - -7.0 - - — Approximate Water Level Elevation, Feet Mean Sea Level, Dashed where Inferred
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

0 300 600

SCALE

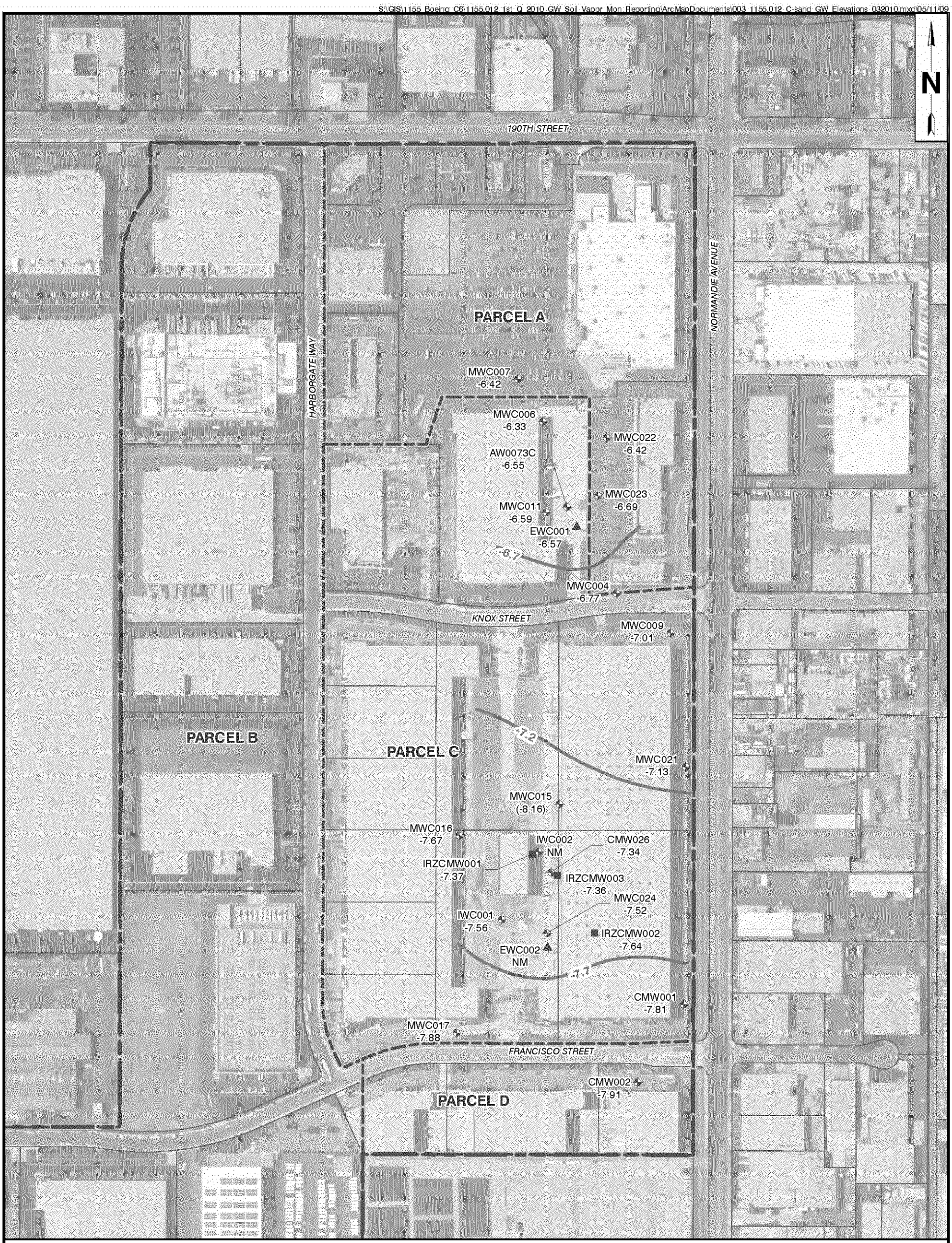
FIGURE 3

B-SAND
GROUNDWATER ELEVATIONS
MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1155 Boeing C6\1155.012 1st Q 2010 GW Soil Vapor Mon Reporting\ArcMapDocuments\003_1155.012_C-sand_GW_Elevations_032010.mxd\05/11/09



LEGEND

- C-Sand IRZ Bioremediation Monitoring Well
- C-Sand Monitoring Well
- C-Sand Observation Well
- -6.55 — Approximate Water Level Elevation, Feet Mean Sea Level, NM Indicates That The Water Level Was Not Measured.
- (-8.16) — Indicates Water Level Elevation Not Used in Contouring
- -7.2 — Approximate Water Level Elevation, Feet Mean Sea Level
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

0 300 600

SCALE

FIGURE 4

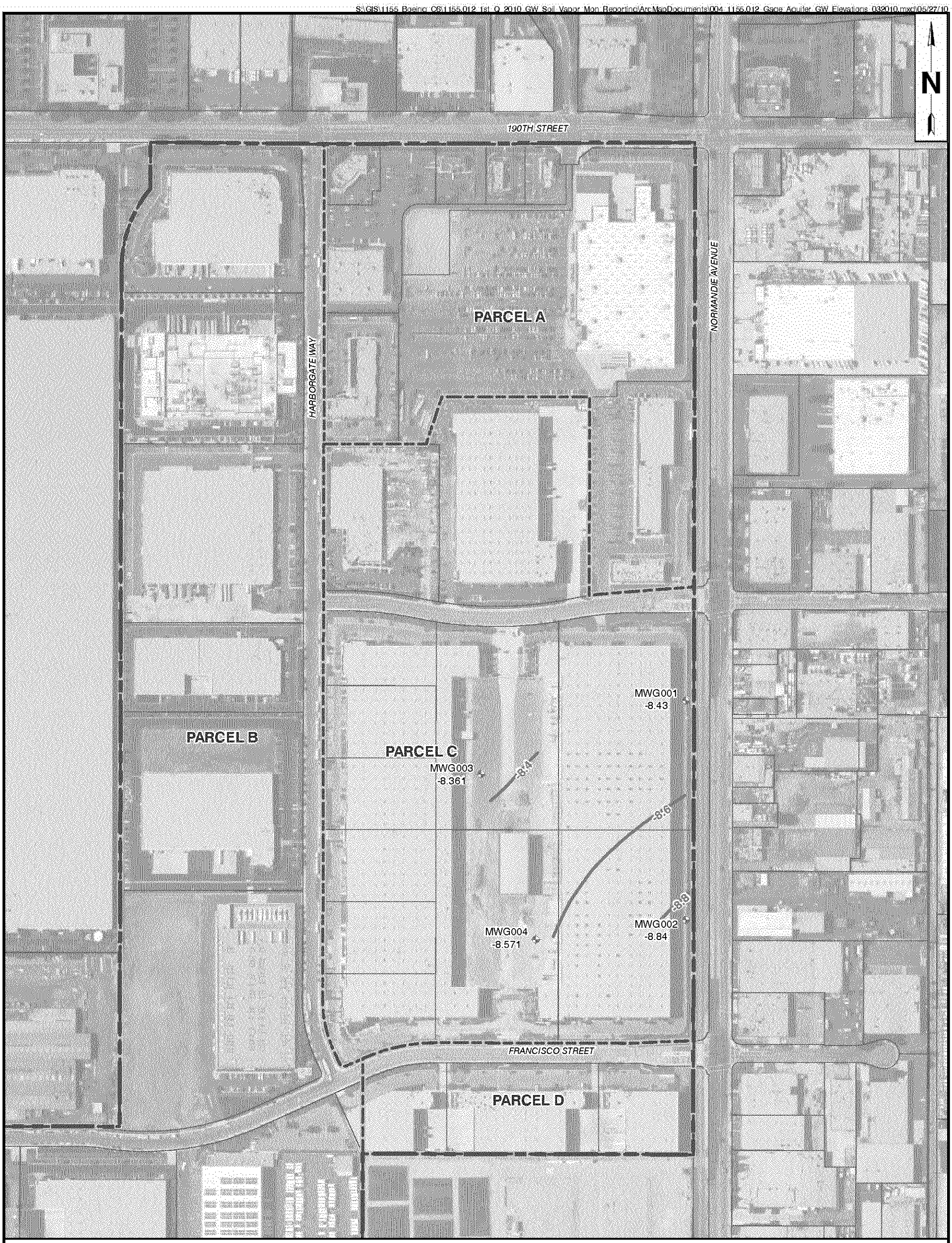
C-SAND GROUNDWATER ELEVATIONS MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

BOE-C6-0059458

S:\GIS\1155_Boeing_C6\1155.012_1st_Q_2010_GW_Soil_Vapor_Mon_Reporting\ArcMapDocuments\004_1155.012_Gage_Aquifer_GW_Elevations_032010.mxd\05/27/10



0 300 600

SCALE

FIGURE 5

GAGE AQUIFER GROUNDWATER ELEVATIONS MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

LEGEND

- Gage Monitoring Well
- -8.27 Approximate Water Level Elevation, Feet Mean Sea Level
- -8.3 — Approximate Water Level Elevation, Feet Mean Sea Level
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

S:\GIS\1155 Boeing C6\1155.012 1st Q 2010 GW Soil Vapor Mon Reporting\ArcMapDocuments\005_1155.012_B-sand_TCE_032010.mxd\05/11/10

N

190TH STREET

MWB020
12

PARCEL A

MWB007
2600

MWB006
<1000

WCC_03S
33

AW0055UB
3600

AW0064UB
<10

MWB027
910

EWB002
0.33

WCC_04S
1500

DAC-P1
(9,300)

AW0077UB
1.3

AW0074UB
510

WCC_05S
1.6

AW0075UB
32

WCC_07S
170

WCC_06S
640

TMW_08
680

MWB003
5000

EWB001
140

MWB028
510

TMW_07
750

WCC_12S
20

MWB013
4.7

WCC_09S
36

IRZMW001B
4100

IRZMW001A
3000

PARCEL C

PARCEL B

IRZMW002B
(36)

MWB012
1100

MW0005
950

IRZMW003B
(390)

TMW_15
20

IRZMW002A
4100

TMW_10
12

IRZB0081
(9.8)

IRZMW003A
12000

BL-03
(550)

IRZMW005
1200

TMW_06
69

IRZB0095
(360)

IRZMW004
2700

XMW-19
NS

MWB014
70

TMW_14
5.7

TMW_11
5.2

MWB019
110

FRANCISCO STREET

XMW-09
NS

PARCEL D

10
100
1,000

0 300 600

SCALE

LEGEND

- B-Sand Monitoring Well
- 150 — TCE Concentration in Groundwater in ug/L; NS Indicates That The Well was Not Sampled
- (450) — Indicates TCE Concentration Not Used in Contouring
- —10— TCE Isoconcentration Contour in ug/L; Dashed Where Uncertain
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

FIGURE 6

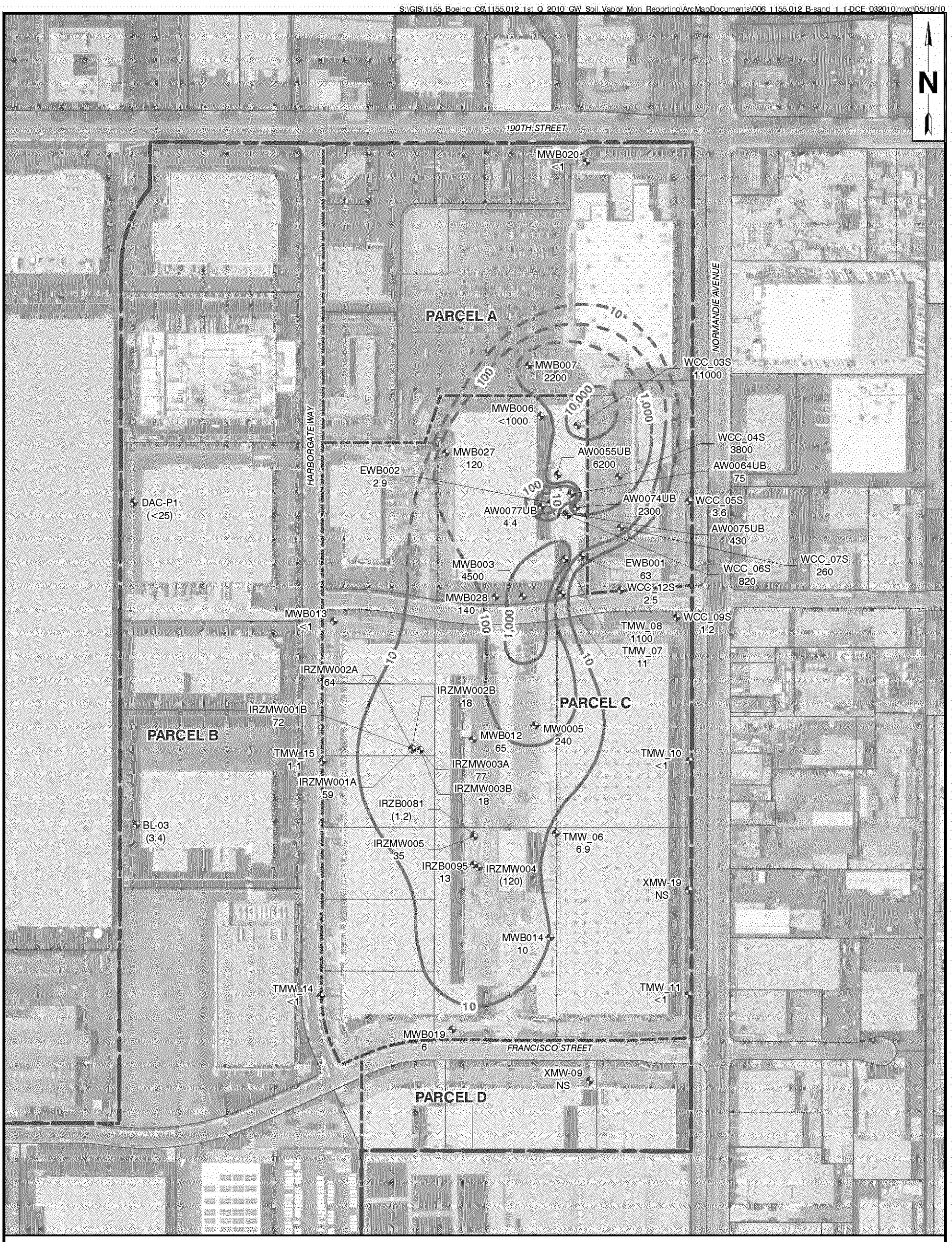
B-SAND GROUNDWATER DISTRIBUTION OF TCE MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

BOE-C6-0059460

S:\GIS\1155_Boeing_C6\1155.012_1st_Q_2010_GW_Soil_Vapor_Mon_Reporting\ArcMapDocuments\006_1155.012_B-sand_1_1-DCE_032010.mxd\05/19/10



0 300 600

SCALE

LEGEND

- B-Sand Monitoring Well
- 240 — 1,1-DCE Concentration in Groundwater in ug/L; NS Indicates That The Well Was Not Sampled
- (1.2) — Indicates 1,1-DCE Concentration Not Used in Contouring
- 10 — 1,1-DCE Isoconcentration Contour in ug/L; Dashed Were Uncertain
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

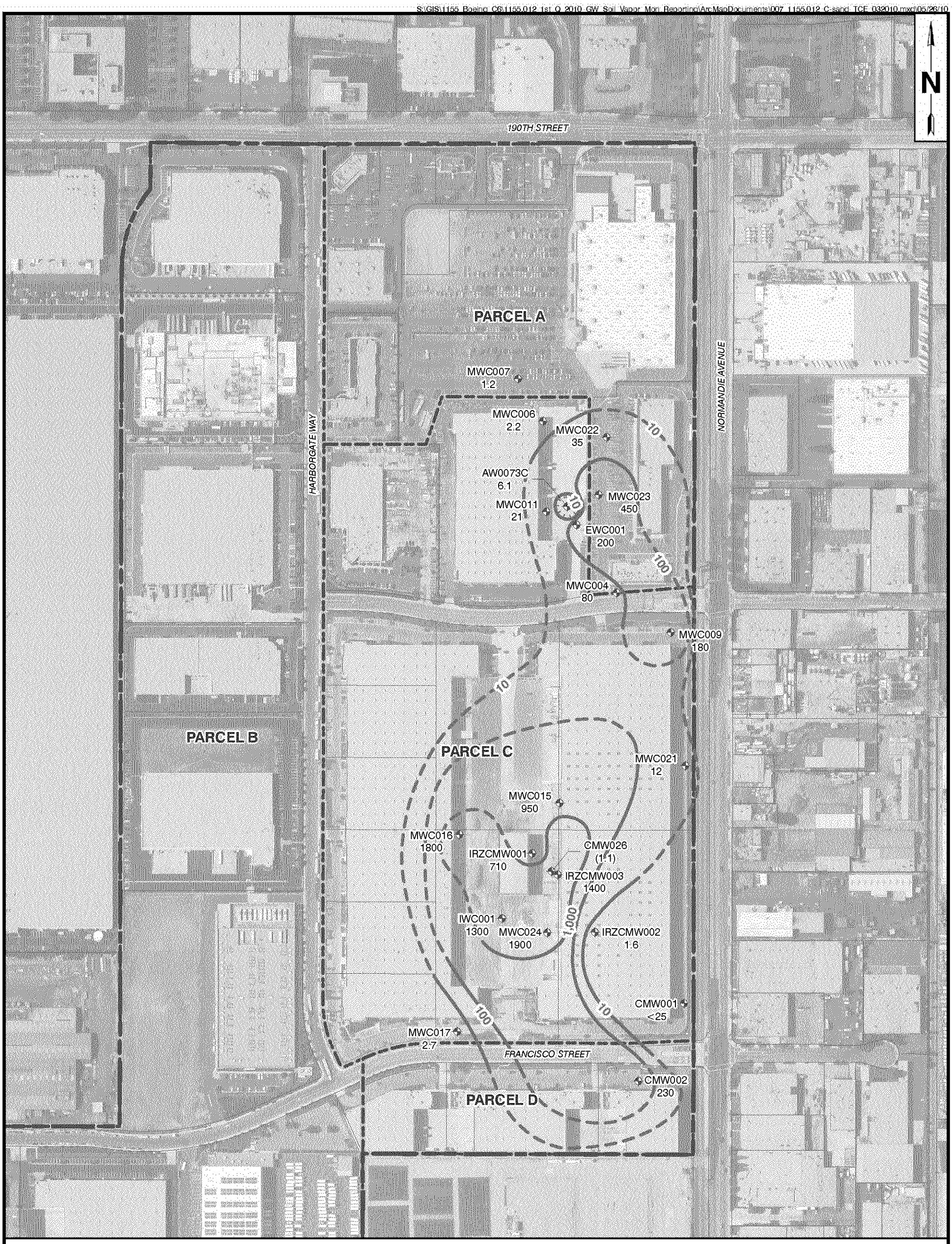
FIGURE 7

B-SAND GROUNDWATER DISTRIBUTION OF 1,1-DCE MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1155_Boeing_C6\1155.012_1st_Q_2010_GW_Soil_Vapor_Mon_Reporting\ArcMapDocuments\007_1155.012_C-sand_TCE_032010.mxd\05/26/10



0 300 600

SCALE

LEGEND

- C-Sand Monitoring Well
- 150 — TCE Concentration in Groundwater in ug/L
- (450) — Indicates TCE Concentration Not Used in Contouring
- 10 — TCE Isoconcentration Contour in ug/L, Dashed Where Uncertain
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

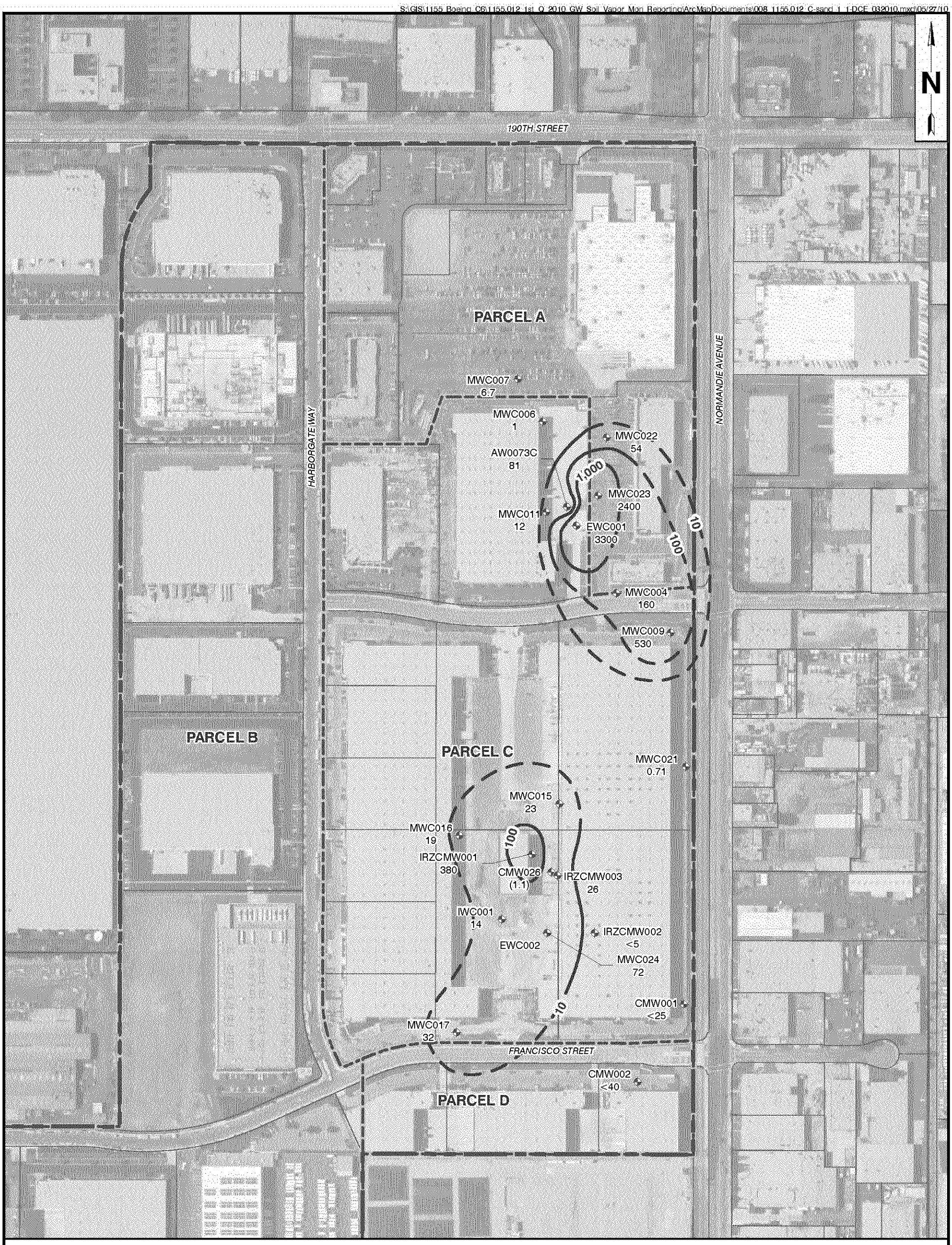
FIGURE 8

C-SAND GROUNDWATER DISTRIBUTION OF TCE MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

S:\GIS\1155_Boeing_C6\1155.012_1st_Q_2010_GW_Soil_Vapor_Mon_Reporting\ArcMapDocuments\008_1155.012_C-sand_1_1-DCE_032010.mxd\05/27/10



LEGEND

- C-Sand Monitoring Well
- 150 — 1, 1-DCE Concentration in Groundwater in ug/L
- (450) — Indicates 1, 1-DCE Concentration Not Used in Contouring
- —10— 1,1-DCE Isoconcentration in ug/L, Dashed Where Uncertain
- Approximate Former C-6 Facility Boundary
- Approximate Parcel Boundary

0 300 600

SCALE

FIGURE 9

C-SAND GROUNDWATER DISTRIBUTION OF 1,1-DCE MARCH 2010

THE BOEING COMPANY
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

AVOCET ENVIRONMENTAL, INC.

Appendix A

Field Forms

AVOCET
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AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2010 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.012

Location: Torrance, CA **Field Personnel:** DML,DAB, BS, DM **Date:** 3/22/2010

CGI Instrument ID: MuliRAE IR **PID Instrument ID:** MultiRAE IR **Solinst ID:** -

Field Conditions: Partly Cloudy, Warm

Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Field Personnel	Time	PID (ppm)	Maximum Previous CGI (%LEL)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
EWB001	Mar-09	55.5	DM	8:16	0		NM	-	TOC-N	55.55	55.55	0.05	good
MWB028	Sep-09	63.72	DL		1.3	0%	0	-	TOC-N	63.56	63.56	-0.16	ok
TMW_07	Sep-09	60.78	DM	8:48	0	0%	0	-	TOC-N	60.6	60.6	-0.18	gross decon/replace rim seal
TMW_08	Mar-09	60.39	DM	9:00	0		0	-	TOC-N	60.55	60.55	0.16	replace rim seal
MWB003	Mar-09	63.44	DL	14:30	0	5%	0	-	TOC-N	63.62	63.62	0.18	
MWC006	Mar-09	60.03	DM	9:13	0		0	-	TOC-N	60.36	60.36	0.33	replace rim seal, bailed H2O
EWB002	Sep-09	60.4	DM	9:37	0	-	0	-	TOC-N	60.15	60.15	-0.25	retap, replace rim seal, replace bolt, gross
AW0077UB	Sep-09	60.61	DM	9:49	0	60%	0	-	TOC-N	60.5	60.5	-0.11	CH4 tag, no bolts, 18" lid
MWC011	Mar-09	60.29	DM	10:00	0		0	-	TOC-N	60.62	60.62	0.33	replace rim seal, bailed H2O
AW0073C	Sep-09	60.17	DM	10:06	0	0%	0	-	TOC-N	59.97	59.97	-0.2	no bolts, 18" lid
WCC_06S	Sep-09	59.17	DM	10:15	0	0%	0	-	TOC-N	59.04	59.04	-0.13	
MWB027	Sep-09	63.61	DM	10:25	0	0%	0	-	TOC-N	63.35	63.35	-0.26	
AW0064UB	Sep-09	58.84	DM	10:34	6.4	31%	8%	>1:00	TOC-N	58.74	58.74	-0.1	24" lid, no bolts, CH4 tag
AW0075UB	Sep-09	59.9	DM	10:43	15.6	30%	4%	>1:00	TOC-N	59.71	59.71	-0.19	18" lid, no bolts, CH4 tag
EWC001	Mar-09	58.95	DM	8:29	0		0	-	TOC-N	59.16	59.16	0.21	replace rim seal and bolts, bailed H@O
AW0074UB	Sep-09	58.35	DM	10:53	0	13%	0	-	TOC-N	59.2	59.2	0.85	18" lid, no bolts
WCC_03S	Sep-09	58.98	DM	11:05	0	0%	0	-	TOC-N	59.05	59.05	0.07	retap, replace rim seal, replace bolts
MWB006	Sep-09	62.94	DM	9:18	1.5	1%	0	0:20	TOC-N	60.14	60.14	-2.8	
AW0055UB	Sep-09	60.09	DM	11:13	17	>100%	0	>1:00	TOC-N	59.92	59.92	-0.17	CH4 tag, no bolts, 18" lid

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2010 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.012

Location: Torrance, CA **Field Personnel:** DML,DAB, BS, DM **Date:** 3/22/2010

CGI Instrument ID: MuliRAE IR **PID Instrument ID:** MultiRAE IR **Solinst ID:** -

Field Conditions: Partly Cloudy, Warm

Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Field Personnel	Time	PID (ppm)	Maximum Previous CGI (%LEL)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
BL-03	Sep-09	65.61	BS	8:15	0	0%			TOC-N	65.75	65.75	0.14	Well seal replaced
DAC-P1	Sep-09	61.3	BS	8:34	0	0%			TOC-N	61.46	61.46	0.16	Well seal replaced
MWC007	Sep-09	57.98	BS	8:59	0	0%	0	-	TOC-N	57.99	57.99	0.01	
WCC_05S	Sep-09	59.31	BS	9:19	0	0%	0	-	TOC-N	59.33	59.33	0.02	
MWC004	Sep-09	58.65	BS	9:31	0	0%	0	-	TOC-N	58.63	58.63	-0.02	
WCC_12S	Sep-09	58.04	BS	9:35	0	0%	0	-	TOC-N	58.01	58.01	-0.03	
MWC022	Sep-09	58.11	BS	9:50	0	0%	0	-	TOC-N	58.02	58.02	-0.09	Well seal replaced
MWB020	Sep-09	56.91	BS	10:00	0	0%	0	-	TOC-N	56.99	56.99	0.08	Apron cracked
WCC_09S	Sep-09	61.66	BS	9:40	0	0%	0	-	TOC-N	61.64	61.64	-0.02	
WCC_07S	Sep-09	58.77	BS	10:10	0	0%	0	-	TOC-N	58.78	58.78	0.01	
MWC023	Sep-09	58.04	BS	10:15	0	0%	0	-	TOC-N	58.12	58.12	0.08	
WCC_04S	Sep-09	58.78	BS	10:24	0	0%	0	-	TOC-N	58.8	58.8	0.02	Well seal replaced
MWB007	Sep-09	57.76	BS	9:04	0	0%	0	-	TOC-N	57.81	57.81	0.05	Well seal replaced
TMW_14	Sep-09	66.21	BS	8:45	0	0%	0	-	TOC-N	66.32	66.32	0.11	Well seal replaced
TMW_15	Sep-09	64.42	BS	8:50	0	0%	0	-	TOC-N	64.48	64.48	0.06	
XMW-09	Mar-09	60.4	-	-	-	0%	-	-	TOC-N	-	-	-	Montrose wells not gauged or sampled
CMW002	Sep-09	60.76	BS	10:32	0	0%			TOC-N	60.72	60.72	-0.04	

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2010 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.012

Location: Torrance, CA **Field Personnel:** DML,DAB, BS, DM **Date:** 3/22/2010

CGI Instrument ID: MuliRAE IR **PID Instrument ID:** MultiRAE IR **Solinst ID:** -

Field Conditions: Partly Cloudy, Warm

Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Field Personnel	Time	PID (ppm)	Maximum Previous CGI (%LEL)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
XMW-19	Mar-09	56.26	-	-	-	0%	-	-	TOC-N	-	-	-	Montrose wells not gauged or sampled
MWB013	Sep-09	61.97	DML	9:40	0	0%	0	-	TOC-N	61.84	61.84	-0.13	
TMW_11	Sep-09	57.21	DML	10:10	0	0%	0	-	TOC-N	56.98	56.98	-0.23	good condition
CMW001	Sep-09	62.43	DML	10:18	0	0%	0	-	TOC-N	62.18	62.18	-0.25	no gasket
TMW_10	Sep-09	56.95	DML	10:36	0	0%	0	-	TOC-N	56.79	56.79	-0.16	hill encroaches on well, partially overgrown
MWC021	Sep-09	62.96	DML	10:45	0	0%	0	-	TOC-N	61.66	61.66	-1.3	
MWG001	Sep-09	62.96	DML	11:34	0	0%			TOC-N	62.56	62.56	-0.4	gross decon/replace rim seal, Bailed H2O
MWC009	Sep-09	61.21	DML	11:45	0	0%	0	-	TOC-N	61	61	-0.21	Bailed H2O, replaced rim seal
MWB019	Sep-09	62.67	DML	11:58	0	0%	0	-	TOC-N	62.62	62.62	-0.05	
MWC017	Sep-09	63.22	DML	12:05	0	0%	0	-	TOC-N	63.04	63.04	-0.18	replaced rim seal
MWG002	Sep-09	63.89	DML	12:14	0	0%			TOC-N	63.62	63.62	-0.27	Bailed H2O, replaced rim seal
IRZCMW002	Sep-09	63.28	DML	8:43	0	11%	4%	20 sec	TOC-N	63.24	63.24	-0.04	
IRZMW001B	Mar-09	63.59	DML	9:05	0.1	1%	0	-	TOC-N	64.02	64.02	0.43	
IRZMW001A	Mar-09	63.63	DML	9:09	4.8	44%	>100%	>5min	TOC-N	64.03	64.03	0.4	
IRZMW002B	Mar-09	63.67	DML	9:12	0	0%	0	-	TOC-N	63.81	63.81	0.14	gasket replaced
IRZMW002A	Mar-09	63.56	DML	9:13	1	0%	0	-	TOC-N	63.72	63.72	0.16	
IRZMW003B	Mar-09	63.67	DML	8:58	0	0%	0	-	TOC-N	63.83	63.83	0.16	gasket replaced
IRZMW003A	Mar-09	63.64	DML	8:59	13.3	0%	6%	20 sec	TOC-N	63.78	63.78	0.14	

AVOCET ENVIRONMENTAL, INC.

Groundwater Monitoring Well Gauging Sheet

Project Name: Boeing C-6 March 2010 Gauging Event **Project Manager:** Michael Rendina **Project No.:** 1155.012

Location: Torrance, CA **Field Personnel:** DML,DAB, BS, DM **Date:** 3/22/2010

CGI Instrument ID: MuliRAE IR **PID Instrument ID:** MultiRAE IR **Solinst ID:** -

Field Conditions: Partly Cloudy, Warm

Sampling Methods: Initial CGI/PID collected approx. 1" above center of casing immediately after opening. Measure elapsed time when CGI ≤ 2%LEL

Well ID	Previous Measurement Date	Previous Depth to Water	Field Personnel	Time	PID (ppm)	Maximum Previous CGI (%LEL)	Initial CGI (%LEL)	Time to Disperse (mm:ss)	Measurement Point	Depth to Water	Depth to Water #2	Change in DTW	Comments/Well Conditon
MWG003	Sep-09	61.8	DAB	8:45	0.1	0%			TOC-N	61.44	61.44	-0.36	1/2 gasket, bailed H2O
MWG004	Sep-09	60.9	DAB	9:03	0.1	0%			TOC-N	60.62	60.62	-0.28	ok
TMW_06	Sep-09	59.01	DAB	9:21	0.2	0%	0	-	TOC-N	58.77	58.77	-0.24	ok
MWB014	Sep-09	59.1	DAB	9:43	0.5	0%	0	-	TOC-N	58.82	58.82	-0.28	3/4" bolt not tapped, but ok for now.
CMW026	Sep-09	59.18	DAB	14:51	0.1	11%	0	-	TOC-N	58.87	58.87	-0.31	ok
MWC015	Sep-09	59.92	DAB	10:00	0.4	0%	0	-	TOC-N	59.67	59.67	-0.25	well cap doesn't seal
MWB012	Mar-09	59.75	DAB	10:18	2.6		0	-	TOC-N	59.47	59.47	-0.28	tubing in well, 5' down, 3/4" bolt not tapped
IRZCMW001	Sep-09	59.32	DAB	10:31	1.2	0%	0	-	TOC-N	59.11	59.11	-0.21	no gasket
TMW_04	Mar-09	58.29	DAB	10:51	0		0	-	TOC-N	58.31	58.31	0.02	ok
MWC016	Mar-09	60.27	DAB	11:13	0.5		0	-	TOC-N	60.28	60.28	0.01	ok
MW0005	Sep-09	59.29	DAB	11:38	1.4	0%	0	-	TOC-N	59.07	59.07	-0.22	well cap doesn't seal, broken gasket
IWC001	Sep-09	61.96	DAB	11:43	0.1	0%	0	-	TOC-N	60.61	60.61	-1.35	broken gasket
MWC024	Sep-09	59.44	DAB	12:10	1.4	>100%	0	-	TOC-N	59.16	59.16	-0.28	
IRZCMW003	Sep-09	59.36	DAB	13:25	3.2	>100%	0	-	TOC-N	59.05	59.05	-0.31	High CO2 4200ppm, boring open, needs
IRZB0081	Mar-09	60.17	DAB	13:54	13.1		21	30 sec	TOC-N	60.09	60.09	-0.08	ok
IRZB0095	Mar-09	59.76	DAB	14:10	0.2		0	-	TOC-N	59.94	59.94	0.18	broken valve
IRZMW004	Mar-09	60.35	DAB	14:46	0.9		0	-	TOC-N	60.25	60.25	-0.1	needs paint, lid eyehole broken
IRZMW005	Mar-09	60.01	DAB	14:38	0.4		0	-	TOC-N	59.91	59.91	-0.1	ok

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0055UB	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	79
		Screen:	69 - 89

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.19	92	31.81	NM	1/4	0.0054	79	0.8	1.23

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.92	3.22	0.400	6.70	-234.00	6.20	
1457	50 PSI / 50 ml/min	1.25	250	60.19	21.50	~~0.5~~ 23.15	0.52	6.61	-113.6	9.45	
1459		1.75		60.19	21.57	3.15	0.49	6.61	-116.8	6.18	
1502	1501	2.25		60.19	21.64	3.15	0.45	6.61	-119.4	6.04	
1504	1503	2.75		60.19	21.67	3.16	0.40	6.61	-121.9	5.98	
1506	1505	3.25		60.19	21.67	3.16	0.37	6.61	-123.2	5.65	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1452	1505	250	3.25	N/A	NA	60.19	1506	AW0055UB_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.15	17	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 25 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0064UB	**Weather:**	Partly Cloudy
Measurement Point Description:	~~TOB~~ TOC	**Pump Intake:** 78.5	**Screen:** 68.5 - 88.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Above Pump Intake (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NM	58.08	92	~~33.92~~ 31.92	NM	1/4	0.0054	78.5	0.8	1.22

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					24.01	3.53	0.410	6.61	-202.00	148.00	
1317	50 PSI/50s/100 ft	1.25	250	58.10	21.57	1.52	0.50	7.11	-157.7	51.0	
1319	↓	1.75	↓	58.11	21.76	1.14	0.32	7.09	-153.6	42.9	
1321		2.25		58.12	21.87	1.00	0.26	7.08	-151.3	21.7	
1323		2.75		58.12	21.95	0.92	0.23	7.07	-150.4	15.3	
1325		3.25		58.12	21.92	0.98	0.26	7.06	-149.8	12.0	
1327		3.75		58.12	21.94	1.01	0.26	7.04	-149.0	11.9	
1329	✓	4.25	✓	58.12	21.95	1.03	0.25	7.04	-149.0	11.7	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1312	1329	250	4.25	N/A	NA	~~1330~~ 58.12	1330	AW0064UB_WG20100325_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
0.67	6.4	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0073C	**Weather:**	cloudy
Measurement Point Description:	TOC	**Pump Intake:**	106
		Screen:	96 - 116

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.27	117	56.73	NM	1/4	0.0054	106	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.22	0.78	1.410	7.40	-26.00	7.00	
1028	65%/50%/100%	1.5	200	60.31	21.74	0.78	1.18	7.41	-135.9	3.61	
1030	↓	2.0	↓	60.33	21.79	0.77	1.01	7.40	-140.6	8.36	
1032		2.5		60.33	21.81	0.77	0.51	7.38	-151.8	7.19	
1034		3.0		60.33	21.82	0.77	0.42	7.37	-157.2	5.30	
1036		3.5		60.33	21.84	0.77	0.33	7.35	-159.5	6.20	
1038		4.0		60.33	21.85	0.77	0.30	7.33	-159.2	6.48	
1040	✓	4.5	✓	60.33	21.90	0.77	0.28	7.31	-158.4	6.18	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1022	1040	250	4.5	N/A	NA	60.33	1041	AW0073C_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	D.O (mg/L)
0.95	0	0.3

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0074UB	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	80' **Screen:** 70 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.46	91	31.54	NM	1/4	0.0054	80	0.8	1.23

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
~~1356~~ 1354	Previous Stabilized Parameters: 09-11-09				23.02	2.53	0.530	6.60	-158.00	6.20	
1356	55PSI/SO:110:H	1.25	250	59.48	21.85	2.40	0.99	6.55	-103.8	23.5	
1358		1.75		59.48	21.89	2.42	0.74	6.55	-106.8	19.7	
1400		2.25		59.48	21.92	2.40	0.52	6.56	-112.3	13.2	
1402		2.75		59.48	21.89	2.39	0.37	6.56	-113.9	9.91	
1404		3.25		59.48	21.91	2.36	0.31	6.57	-114.9	7.93	
1406		3.75		59.48	21.90	2.34	0.29	6.57	-115.1	7.27	
1407	↓	4.25	↓	59.48	21.90	2.33	0.32	6.57	-115.4	7.40	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
~~1349~~ 1351	1407	250	4.25	N/A	NA	59.48	1408	AW0074UB_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.08	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0075UB	**Weather:**	Partly cloudy
Measurement Point Description:	TOC	**Pump Intake:**	79 **Screen:** 69 - 89

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.95	93	33.05	NM	1/4	0.0054	79	0.8	1.23

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.76	2.32	0.500	7.62	-156.90	4.20	
1240	50psi / 50 l/hr	1.25	250	59.95	22.08	2.57	0.67	6.89	-116.0	8.74	
1242		1.75		59.95	22.09	2.67	0.54	6.87	-122.5	8.54	
1244		2.25		59.95	22.16	2.70	0.45	6.87	-127.2	7.34	
1246		2.75		59.95	22.12	2.72	0.39	6.88	-129.8	5.58	
1248		3.25		59.95	22.09	2.74	0.33	6.89	-132.0	4.23	
1250		3.75		59.95	22.09	2.74	0.32	6.89	-133.0	3.93	
1252	↓	4.25	↓	59.95	22.16	2.74	0.30	6.89	-134.4	3.60	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1235	1252	250	4.25	N/A	NA	59.95	1253	AW0075UB_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.54	15.6	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	AW0077UB	**Weather:**	cloudy
Measurement Point Description:	TOC	**Pump Intake:** 78	**Screen:** 70.5 - 85.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Above Pump Intake(ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NM	60.78	86	25.22	NM	1/4	0.0054	78	0.8	1.22

	Gallons/Foot				
Well Diameter (inches) = 2	0.75	2	4	6	
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.74	3.05	0.250	6.80	-199.80	4.00	
0931	50PSI/30./10CPL	1.25	250	60.80	20.97	3.18	0.84	6.92	-132.3	15.3	
0933	↓	1.75	↓	60.80	21.32	3.06	0.63	6.88	-141.8	12.9	
0935		2.25		60.80	21.46	3.00	0.57	6.88	-146.1	10.2	
0937		2.75		60.80	21.50	2.95	0.52	6.86	-149.1	9.4	
0939		3.25		60.80	21.52	2.93	0.45	6.86	-152.0	8.8	
0941		3.75		60.80	21.50	2.90	0.44	6.85	-153.3	8.6	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0926	0941	250	3.75	N/A	NA	60.80	0942	AW0077UB_WG20100325_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.05	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 22 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	BL-03	**Weather:**	Partly cloudy
Measurement Point Description:	TOC	**Pump Intake:** 69	**Screen:** 59 - 79

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
—	65.75	79	13.25	—	1/4	0.0054	~~75~~ 69.75	0.80	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Parcel B
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 3/16/2009 8:05:00 AM					19.03	3.02	2.310	6.79	78.00	7.60	
1256	40PSI 50-100ft	1.2	200	65.75	21.79	2.93	4.32	6.69	-3.4	55	
1258	↓	1.7	↓	65.75	21.84	2.96	3.98	6.69	1.0	52	
1301		2.3		65.75	21.82	2.97 Dup.	3.84	6.67	7.7	54	
1303		2.8		65.75	21.91	2.98	3.74	6.67	11.7	52	
1306		3.2		65.75	21.97	2.98	3.67	6.67	16.5	49	
1308	✓	3.7	✓	65.75	22.0	2.99	3.63	6.69	19.6	48	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1250	1308	200	3.7	N/A	NA	65.75	1309	BL-03_WG201003 22 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters
PID (ppm): 0.0

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	CMW001	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	112
		Screen:	99 - 124

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	62.21	124	50	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					24.63	0.74	0.230	9.24	-318.00	0.39	
0747	84 psi	1.5	300	62.29	21.79	0.854	0.90	7.41	-43.2	3	
0750	84 psi	2.4	300	62.29	21.92	0.850	0.67	7.38	-35.4	3	
0753	84 psi	3.3	300	62.30	21.96	0.849	0.66	7.48	-30.6	2	
0756	84 psi	4.2	300	62.30	21.92	0.848	0.65	7.47	-30.1	2	
0759	84 psi	5.1	300	62.30	21.90	0.847	0.59	7.47	-29.8	2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0742	0803	300	5	N/A	NA	62.30	0800	CMW001_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	~~IBZ~~CMW002	**Weather:**	SUNNY
Measurement Point Description:	TOC - N	**Pump Intake:**	112
		Screen:	~~96 - 121~~ 99-124

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	60.60	124	52	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					21.40	1.87	0.200	6.56	-121.00	0.94	
1124	70 psi	1.5	250	60.63	21.36	1.042	0.77	7.40	63.1	5	
1127	70 psi	2.3	250	60.62	21.37	1.041	0.68	7.42	62.1	3	
1130	70 psi	3.0	250	60.62	21.40	1.041	0.60	7.43	60.4	3	
1133	70 psi	3.8	250	60.62	21.41	1.041	0.60	7.42	58.7	3	
1136	70 psi	4.5	250	60.62	21.41	1.041	0.60	7.43	56.3	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1118	1145	250	5	N/A	NA	60.62	1139	~~IBZ~~CMW002_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):
0.09	0

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	CMW026	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	105
		Screen:	92 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.78	117	DM ~~105~~ 45	NA	1/4	0.0054	110	0.75	1.35

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					21.89	1.71	0.290	6.62	-137.00	0.49	
1030	70 psi	1.5	250	58.87	21.39	1.629	0.81	6.66	-44.3	59	
1033	70 psi	2.3	250	58.92	21.39	1.631	0.81	7.06	-56.2	8	
1036	70 psi	3.0	250	58.95	21.35	1.634	0.79	6.96	-68.8	5	
1039	70 psi	3.8	250	58.97	21.30	1.639	0.78	6.97	-77.5	4	
1042	70 psi	4.5	250	58.98	21.33	1.641	0.76	6.99	-82.8	4	
1045	70 psi	5.3	250	58.99	21.36	1.641	0.72	6.96	-86.1	4	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1024	1058	250	6	N/A	NA	58.99	1048	CMW026_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.29	0.1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 22 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	DAC-P1	**Weather:**	Cloudy
Measurement Point Description:	TOC	**Pump Intake:**	75' **Screen:** 60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
—	61.46	90		—	1/4	0.0054	80'	.80	1.3

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, Parcel B
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 3/16/2009 10:10:00 AM					20.57	1.89	2.690	7.13	41.00	32.60	
1345	48PSI 50/100FT	1.3	200	61.47	21.43	~~3.67~~ 1.93	3.65	6.96	10.1	18.60	
1347	↓	1.8	↓	61.47	21.51	1.90	3.50	6.95	11.4	8.71	
1350		2.3		61.47	21.61	1.89	3.37	6.93	13.5	6.78	
1352		2.8		61.47	21.70	1.88	3.24	6.92	14.8	6.46	
1355		3.3		61.47	21.88	1.88	3.24	6.92	15.9	5.94	
1357	↓	3.8	↓	61.47	22.00	1.88	3.18	6.92	17.2	6.03	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1338	1357	200	3.8	N/A	NA	61.47	1358	DAC-P1_WG201003 22 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters
PID (ppm): 0

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	EWB001	**Weather:**	Sunny
Measurement Point Description:	TOC, N	**Pump Intake:**	74'
		Screen:	59.2 - 89.2

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	55.55	89.2	19	NA	1/4	0.0054	85	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 6	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					22.67	2.38	1.400	7.01	32.00	62.60	
0816	62 psi	1.2	300	55.58	21.12	3.437	5.42	6.55	220.3	96	
0819	62 psi	2.1	300	55.57	21.55	3.438	5.14	6.64	218.9	40	
0822	62 psi	3.0	300	55.58	21.58	3.442	5.13	6.67	218.9	29	
0825	62 psi	3.9	300	55.58	21.59	3.441	5.15	6.67	219.0	24	
0828	62 psi	4.8	300	55.58	21.60	3.442	5.06	6.70	219.2	24	
0831	62 psi	5.7	300	55.58	21.61	3.441	5.08	6.72	219.3	22	
0834	62 psi	6.6	300	55.58	21.64	3.441	5.03	6.74	219.4	23	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0812	0836	300	7	N/A	NA	55.58	0835	EWB001_WG20100323_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 25 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	EWB002	**Weather:**	Cloudy
Measurement Point Description:	TOC	**Pump Intake:**	75'
		Screen:	60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.53	90	29.47	NM	1/4	0.0054	75'	0.8	1.2

	Gallons/Foot			
Well Diameter (inches) = 6	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
50 PSI/30.1/10 cfh	Previous Stabilized Parameters: 09-10-09				23.60	3.00	0.570	6.71	-93.60	31.60	
0958	~~0958~~	1.25	250	60.53	21.58	2.54	1.37	6.85	-95.0	5.42	
1000		1.75		60.53	21.71	2.64	0.74	6.81	-97.3	2.38	
1002		2.25		60.53	21.76	2.68	0.64	6.79	-99.2	2.45	
1004		2.75		60.53	21.79	2.70	0.49	6.79	-100.8	2.60	
1006		3.25		60.53	21.79	2.71	0.43	6.78	-102.0	2.52	
1008	↓	3.75	↓	60.53	21.77	2.71	0.45	6.78	-102.4	2.61	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0953	1008	250	3.75	N/A	NA	60.53	1009	EWB002_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.66	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	EWC001	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	109.5
		Screen:	97 - 122

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.40	125	65.60	NM	1/4	0.0054	109.5	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					21.42	1.36	1.200	2.06	-73.00	2.80	
1359	65PSI/SCFH 110cfh	1.5	250	65.65	22.40	1.15	0.91	6.85	-103.1	14.6	
1401		2.0		65.67	22.41	1.29	0.62	6.83	-112.0	12.3	
1403		2.5		65.68	22.40	1.38	0.41	6.82	-136.0	12.0	
1405		3.0		65.68	22.33	1.45	0.34	6.81	-142.6	11.6	
1407		3.5		65.68	22.33	1.49	0.36	6.80	-146.4	11.0	
1409	↓	4.0	↓	65.68	22.33	1.48	0.35	6.80	-149.7	11.2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1353	1409	250	4.0	N/A	NA	65.68	1410	EWC001_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:

DRUM NO: EB-AV-102403 @ 1345

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	03/ 25 /2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZB0081	**Weather:**	Cloudy
Measurement Point Description:	TOC	**Pump Intake:**	89' **Screen:** 64.5 – 89.5

A	B	C	D = C - B	E = B - A	G = D x F	H = screen length x F	I = 3G or G+2H
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Height** (ft)	**LNAPL Thickness** (ft)	**One Casing Volume** (gallons)	**Screen Volume** (gallons)	**Minimum Purge Volume** (gal.)
NM	60.48	89.5	NM	NM	0.6	0.5	1.8

	Gallons/Foot				
Well Diameter (inches) =	0.75	2	4	6	8
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	2.61

Field Equipment: Waterra / YSI 556
Purge Method: Check valve + Tubing
Well Condition: Good

Time	Casing Volumes	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	pH [+/- 0.1 pH]	Conductivity (mS/cm) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	Temperature (°C) [+/- 10%]	ORP (mV) [+/- 10%]	Observations
0832	0.5	0.3	NM	NM	6.81	1.76	71000	~~71000~~ 0.56	20.51	-144.1	
0834	1.0	0.6			6.91	1.75	71000	0.68	19.83	-169.3	
0836	1.5	0.9			6.86	1.76	71000	0.42	20.38	-156.3	
0838	2.0	1.2			6.83	1.75	71000	0.40	21.02	-149.3	
0840	2.5	1.5			6.77	1.73	71000	0.42	21.09	-148.3	
0842	3.0	1.8			6.80	1.70	71000	0.46	21.01	-143.6	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0829							0830	IRZB0081-WG-20100325-01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.40	13.1	NM

DUP:
DRUM NO:

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	03/25 /2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZB0095	**Weather:**	Cloudy
Measurement Point Description:	TOC	**Pump Intake:**	89' **Screen:** 65 - 90

A	B	C	D = C - B	E = B - A	G = D x F	H = screen length x F	I = 3G or G+2H
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Height** (ft)	**LNAPL Thickness** (ft)	**One Casing Volume** (gallons)	**Screen Volume** (gallons)	**Minimum Purge Volume** (gal.)
NM	59.91	90	30.09	NM	0.6	0.5	1.8

	Gallons/Foot				
Well Diameter (inches) =	0.75	2	4	6	8
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	2.61

Field Equipment: Waterra / YSI 556
Purge Method: check valve tubing
Well Condition: Good

Time	Casing Volumes	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	pH [+/- 0.1 pH]	Conductivity (mS/cm²) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	Temperature (°C) [+/- 10%]	ORP (mV) [+/- 10%]	Observations
0735	0.5	0.3	NM	NM	6.80	2.14	>1000	1.43	20.40	-67.5	
0736	1.0	0.6	↓	↓	6.84	1.92	>1000	1.15	21.28	-86.6	
0739	1.5	0.9			6.89	1.71	>1000	1.20	21.49	-92.2	
0741	2.0	1.2			6.89	1.66	>1000	1.25	21.80	-94.5	
0744	2.5	1.5			6.89	1.68	>1000	1.19	21.53	-97.3	
0746	3.0	1.8			6.88	1.63	>1000	1.22	21.47	-99.3	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0732	0746	NM	1.8	3.0	65.93	60.12	0749	IRZB0095-WG20100325-01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.49	0.2	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3/23/2010
Project No.:	1155.010	**Prepared by:**	BN
Well Identification:	IRZCMW001	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:** 104.5'	**Screen:** 92 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Above Pump Intake(ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NM	59.14	117	57.86	NM	1/4	0.0054	104.5	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good / Gasket replaced

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					22.47	1.25	0.280	7.00	-55.00	0.38	
0950	65psi/5on/10off	1.5	250	59.19	21.49	1.26	0.97	6.83	-110.9	3.52	
0952	↓	2.0	↓	59.21	21.61	1.26	0.57	6.83	-107.5	4.37	
0954		2.5		59.21	21.72	1.26	0.51	6.82	-105.3	2.46	
0956		3.0		59.21	21.77	1.26	0.44	6.82	-102.6	2.58	
0958		3.5		59.21	21.81	1.26	0.40	6.81	-100.3	2.59	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0944	0958	250	3.5	N/A	NA	59.21	0959	IRZCMW001_WG20100323_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.0	1.2	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IR2 CMW002	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:** ~~HHS~~ 108.5	**Screen:** ~~99 - 124~~ 96-128

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.19	124	60.18	NM.	1/4	0.0054	111.5	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good / Gasket replaced

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
~~0926~~	Previous Stabilized Parameters: 09-09-09				22.20	1.02	0.410	6.65	-35.00	0.11	
0821	65PSI 5on/10off	~~200~~ 1.4	200	63.25	20.57	1.84	1.77	6.34	-82.5	6.65	
0822	↓	1.9	↓	63.27	20.91	~~0.87~~ 1.87	0.68	6.34	-101.5	5.17	
0825		2.4		63.27	20.96	1.89	0.67	6.33	-104.9	3.81	
0827		2.9		63.27	20.99	1.90	0.60	6.33	-109.3	3.69	
0830		3.4		63.27	21.02	1.90	0.58	6.33	-113.2	3.55	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0814	0830	200	3.4	N/A	NA	63.27	0831	IR2CMW002_WG20100323_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.46	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3/23/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZCMW003	**Weather:**	sunny
Measurement Point Description:	TOC	**Pump Intake:**	104.5
		Screen:	92 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.22	117	57.78	NM	1/4	0.0054	104.5	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					22.27	1.16	1.070	7.01	-138.00	0.52	
1124	60PSI/50.1/100 L/H	1.5	250	57.92	21.33	1.23	1.28	6.68	-109.8	3.72	
1126	↓	2.0	↓	57.94	21.30	1.25	0.74	6.57	-104.1	3.67	
1128		2.5		57.95	21.26	1.26	0.55	6.59	-101.5	3.57	
1130		3.0		57.95	21.29	1.26	0.52	6.60	-99.2	3.46	
1132	↓	3.5	↓	57.95	21.26	1.26	0.55	6.60	-98.1	3.53	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1118	1132	250	3.5	N/A	NA	57.95	1133	IRZCMW003_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.20	3.2	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Bems
Well Identification:	IRZMW001A	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	70
		Screen:	65 - 75

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	64.40	75	10.60	NM	1/4	0.0054	70	0.8	1.2

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
~~1210~~	Previous Stabilized Parameters: 03-13-09				21.55	2.09	0.330	7.92	-98.00	13.20	
1211	45 PSI / 500 / 100 mL	1.25	250	64.42	21.59	2.53	0.91	7.15	-45.2	29.3	
1213	↓	1.75	↓	64.42	21.73	2.54	0.61	7.14	-47.6	17.6	
1215		2.25		64.42	21.78	2.54	0.40	7.14	-49.7	10.8	
1217		2.75		64.42	21.80	2.54	0.35	7.14	-51.1	10.2	
1219	↓	3.25	↓	64.42	21.81	2.54	0.32	7.13	-52.6	11.1	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1206	1219	250	3.25	N/A	NA	64.42	1220	IRZMW001A_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.38	4.8	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 24 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZMW001B	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:** 85'	**Screen:** 80 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Above Pump Intake(ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NM	64.21	90	25.79	NM	1/4	0.0054	85	0.8	1.3

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-13-09					21.59	1.71	0.260	7.81	-143.00	1.04	
0920	52R/5I/50/100psi	1.5	250	64.24	20.96	1.75	1.03	7.05	49.2	9.55	
0922	↓	2.0	↓	64.24	21.13	1.77	0.86	7.06	33.2	5.06	
0924		2.5		64.24	21.21	1.76	0.71	7.07	25.8	4.49	
0926		3.0		64.24	21.28	1.77	0.78	7.07	19.3	4.04	
0928		3.5		64.24	21.34	1.77	0.66	7.07	15.2	3.96	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0914	0928	250	3.5	N/A	NA	64.24	0929	IRZMW001B_WG20100324_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
0.26	0.1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	BN
Well Identification:	IRZMW002A	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	73.5
		Screen:	68 - 78

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.36	78		NM	1/4	0.0054	73.5'	0.8	1.2

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good / Gasket replaced

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-13-09					21.49	2.13	0.460	7.89	-102.00	126.00	
1107	45PSI/100 Solenoid	1.25	250	63.36	21.25	2.45	1.51	7.10	-35.1	182	
1109	↓	2.75	↓	63.38	21.48	2.44	0.80	7.10	-37.9	222	
1111		3.25		63.38	21.62	2.45	0.67	7.10	-40.6	236	
1113		3.75		63.38	21.69	2.45	0.48	7.11	-43.1	238	
1115		4.25		63.38	21.72	2.45	0.43	7.11	-44.6	230	
1117	✓	4.75	✓	63.38	21.73	2.45	0.40	7.11	-45.6	227	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1102	1117	250	4.75	N/A	NA	63.38	1118	IRZMW002A_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.45	1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZMW002B	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	85' **Screen:** 83 - 93

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.63	93	29.37	NM	1/4	0.0054	85'	0.8	1.3

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-13-09					21.10	1.90	0.320	7.60	194.00	61.10	
0954	52PSI/30m/10mL	1.5	250	63.63	21.10	1.69	0.80	7.16	-28.5	14.2	
0956		2.0	~~63.63~~	63.63	21.14	1.69	0.92	7.16	-36.5	10.2	
0958		2.5		63.63	21.31	1.69	0.71	7.15	-42.6	9.16	
1000		3.0		63.63	21.38	1.68	0.60	7.15	-48.0	7.54	
1002		3.5		63.63	21.44	1.68	0.51	7.14	-54.6	7.66	
1004		4.0		63.63	21.48	1.69	0.54	7.12	-57.0	7.18	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0948	1004	250	4.0	N/A	NA	63.63	1005	IRZMW002B_WG20100324_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.49	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S
Well Identification:	IRZMW003A	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	66'
		Screen:	61 - 71

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	64.45	71	5.55	NM	1/4	0.0054	66'	0.8	1.1

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good / Gasket replaced

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-13-09					21.69	1.60	0.230	7.85	-82.00	104.00	
1234	43PSI/50mL/10cM	1.25	250	64.47	21.49	2.51	1.01	7.11	-49.9	108.3	
1236		1.75		64.47	21.56	2.33	0.87	7.08	-50.2	96.6	
1238		2.25		64.47	21.59	2.31	0.79	7.07	-50.4	89.3	
1240		2.75		64.47	21.64	2.29	0.73	7.05	-51.9	87.6	
1242	↓	3.25	↓	64.47	21.64	2.28	0.68	7.05	-52.1	85.3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1229	1242	250	3.25	N/A	NA	64.47	1243	IRZMW003A_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.11	13.3	NM

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZMW003B	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	85'
		Screen:	80 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	64.09	90	25.91	NM	1/4	0.0054	85'	0.8	1.3

	Gallons/Foot			
Well Diameter (inches) = 1.5	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-13-09					21.40	1.84	0.390	7.78	-176.00	24.00	
1027	52 PSI/30.1 l/100 hr	1.5	250	64.11	20.87	1.62	1.18	7.12	-98.6	22.0	
1029		2.0		64.11	21.07	1.61	0.88	7.10	-96.9	24.1	
1032		2.5		64.11	21.25	1.60	0.64	7.07	-94.2	25.0	
1034		3.0		64.11	21.36	1.60	0.54	7.07	-92.5	15.9	
1036		3.5		64.11	21.42	1.60	0.46	7.07	-92.2	15.5	
1038	↓	4.0	↓	64.11	21.48	1.60	0.41	7.07	-92.6	15.0	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1022	1038	250	4.0	N/A	NA	64.11	1039	IRZMW003B_WG201003 24_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.65	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	IRZMW004	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	77.5' **Screen:** 65 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.40	90	29.60	NM	1/4	0.0054	77.5	0.8	1.25

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good / Replaced Gasket

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					20.31	2.19	0.670	6.79	-75.00	7.60	
1302	50 PSI Sun/100%	1.25	250	60.43	22.01	2.05	0.95	6.62	-25.6	5.33	
1304	↓	1.75	↓	60.44	22.01	2.07	0.87	6.68	-29.6	3.18	
1306	↓	2.25	↓	60.44	22.04	2.09	0.82	6.70	-34.8	2.96	
1308	↓	2.75	↓	60.44	22.05	2.09	0.74	6.70	-35.8	3.27	
~~1310~~		~~3.25~~ B.V.									

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1257	1308	250	2.75	N/A	NA	60.44	1309	IRZMW004_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.01	0.9	NM

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/23 / 2010
Project No.:	1155.010	**Prepared by:**	Bens
Well Identification:	IRZMW005	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:** 77.5	**Screen:** 65 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.05	90	29.95	NM	1/4	0.0054	77.5	0.8	1.25

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Lock / Gasket replaced

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					19.15	1.79	0.460	6.83	-82.30	8.40	
1427	50PSI/50:/10.LL	1.25	250	60.09	22.55	1.82	1.00	6.76	-83.2	43.2	
1429		1.75		60.09	22.52	1.82	0.66	6.73	-79.9	34.1	
1431		2.25		60.09	22.57	1.82	0.54	6.71	-78.7	26.5	
1433		2.75		60.09	22.52	1.82	0.51	6.71	-77.9	18.1	
~~1435~~ 1435		3.25		60.09	22.52	1.81	0.40	6.73	-78.0	10.5	
~~1437~~ 1437		3.75		60.09	22.52	1.81	0.37	6.74	-78.6	7.75	
~~1439~~ 1439		4.25		60.09	22.52	1.81	0.37	6.76	-79.1	7.39	
1441		4.75		60.09	22.47	1.81	0.35	6.78	-80.4	7.22	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1422	1441	250	4.75	N/A	NA	60.09	1442	IRZMW005_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	D.O. (mg/L)
0.22	0.4	0.4

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	IWC001	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	105
		Screen:	95 - 115

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	60.67	115	44	NA	1/4	0.0054	110	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-12-09					22.56	1.34	4.410	8.13	-1.00	53.00	
1517	82 psi	1.5	300	60.80	22.03	1.329	2.47	7.29	160.4	42	
1520	82 psi	2.4	300	60.81	21.98	1.370	2.37	7.45	160.1	51	
1523	82 psi	3.3	300	60.81	21.97	1.366	2.28	7.46	159.9	59	
1526	82 psi	4.2	300	60.81	21.94	1.363	2.34	7.46	159.9	51	
1529	82 psi	5.1	300	60.81	21.93	1.364	2.30	7.46	159.7	55	
1532	82 psi	6.0	300	60.81	21.93	1.364	2.41	7.46	159.9	54	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1512	1539	300	6	N/A	NA	60.81	1534	IWC001_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MW0005	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	59.06	85	16	NA	1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-12-09					22.77	1.63	3.300	7.91	-23.00	15.40	
1401	57 psi	1.2	300	59.06	22.81	1.379	3.47	7.36	142.7	36	
1404	57 psi	2.1	300	59.06	22.65	1.327	4.46	7.43	139.9	50	
1407	57 psi	3.0	300	59.06	22.60	1.249	4.80	7.47	139.1	58	
1410	57 psi	3.9	300	59.06	22.64	1.177	5.30	7.51	139.4	66	
1413	57 psi	4.8	300	59.06	22.64	1.149	5.24	7.53	139.8	62	
1416	57 psi	5.7	300	59.06	22.62	1.150	5.30	7.55	140.3	65	
1419	57 psi	6.6	300	59.06	22.65	1.152	5.27	7.56	141.0	61	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1357	1435	300	7	N/A	NA	AMS 59.06	1421	MW0005_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	1.4	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/23/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB003	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	77
		Screen:	65 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	63.62	90	13	NA	1/4	0.0054	85	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					22.91	1.99	4.800	7.04	36.00	20.60	
1430	66 psi	1.40	350	63.62	22.05	2.155	3.93	7.18	132.9	>1000	
1433	66 psi	2.40	350	63.62	22.02	2.150	3.84	7.18	133.9	>1000	
1436	66 psi	3.50	350	63.62	22.04	2.144	3.73	7.18	135.5	>1000	
1439	66 psi	4.55	350	63.62	22.09	2.131	3.77	7.18	136.4	>1000	
1442	66 psi	5.60	350	63.62	22.07	2.109	3.48	7.18	137.7	729	
1445	66 psi	6.65	350	63.62	22.06	2.100	3.44	7.18	138.1	615	
1448	66 psi	~~6~~ 7.75	350	63.62	22.06	2.082	3.42	7.17	139.6	542	
1451	66 psi	8.80	350	63.62	22.05	2.076	3.29	7.16	140.4	509	
1454	66 psi	9.90	350	63.62	22.06	2.071	3.24	7.17	141.0	497	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1426		350		N/A	NA		1457	MWB003_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	CHEMets D.O.=
NM	0	3 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DML
Well Identification:	MWB006	**Weather:**	Partly/Mostly Cloudy, warm
Measurement Point Description:	TOC-N	**Pump Intake:** 77.5	**Screen:** 65 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.32	90	17.2	NA	1/4	0.0054	80'	.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					23.81	7.83	0.450	5.65	-161.00	4.96	
12:05	45 psi 11/9	1.2	200	60.45	22.76	8.03	0.17	5.92	-111	2.18	
12:08	↓	1.8	200	60.52	22.85	8.03	0.15	5.91	-114	0.97	
12:11		2.4	200	60.71	22.87	8.02	0.13	5.91	-116	0.76	
12:14		3.0	200	60.85	22.94	8.02	0.13	5.90	-118	0.60	
12:17		3.6	200	61.02	22.94	8.01	0.12	5.91	-119	0.74	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
12:00	12:17	200	3.6	N/A	NA	61.02	12:18	MWB006_WG20100325_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
1.87	1.5	NM

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB007	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	57.70	90	17	NA	1/4	0.0054	85	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					23.76	1.82	3.620	7.03	46.00	5.70	
1532	63 psi	1.4	350	57.70	21.93	2.007	3.26	7.36	99.5	3	
1535	63 psi	2.5	350	57.70	21.87	2.009	3.15	7.37	101.4	3	
1538	63 psi	3.5	350	57.70	21.89	2.006	3.12	7.37	104.0	2	
1541	63 psi	4.6	350	57.70	21.85	2.007	3.10	7.37	104.7	2	
1544	63 psi	5.6	350	57.70	21.86	2.006	3.12	7.37	104.9	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1528		350	6	N/A	NA	57.70	1545	MWB007_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB012	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	64.5 - 84.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	59.52	84.5	15	NA	1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-10-09					22.73	1.35	8.010	7.37	22.00	48.40	
1149	60 psi	1.3	325	59.57	22.48	1.749	4.51	7.78	112.5	7	
1152	60 psi	2.3	325	59.58	22.47	1.747	4.62	7.72	113.0	4	
1155	60 psi	3.3	325	59.56	22.44	1.747	4.62	7.76	113.3	6	
1158	60 psi	4.2	325	59.56	22.44	1.747	4.61	7.80	113.9	5	
1201	60 psi	5.2	325	59.57	22.43	1.748	4.60	7.85	114.1	4	
1204	60 psi	6.2	325	59.56	22.41	1.749	4.66	7.87	115.3	4	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1145	1207	325	6.5	N/A	NA	59.56	1205	MWB012_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	2.6	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB013	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	61.87	85	13	NA	1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					23.15	1.51	6.040	8.75	13.00	1.14	
0818	65 psi	1.2	400	61.96	21.27	1.729	5.29	6.69	41.8	4	
0821	65 psi	2.4	400	61.98	21.49	1.737	5.51	6.87	48.6	3	
0824	65 psi	3.6	400	61.98	21.54	1.738	5.44	6.84	52.7	2	
0827	65 psi	4.8	400	61.98	21.54	1.738	5.37	6.87	58.9	3	
0830	65 psi	6.0	400	61.98	21.53	1.736	5.42	6.89	64.9	2	
0833	65 psi	7.2	400	61.98	21.52	1.736	5.40	6.90	66.7	2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0815	0848	400	7.5	N/A	NA	61.98	0835	MWB013_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB014	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	~~58.95~~ 59.05	95	16	NA	1/4	0.0054	85	0.75	1.2

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** YSI, Portable Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-10-09					21.59	1.28	3.940	7.12		54.00	
0908	53 psi	1.2	300	59.03	20.99	1.250	3.71	7.58	202.1	35	
0911	53 psi	2.1	300	59.02	21.06	1.261	3.82	7.57	202.0	15	
0914	53 psi	3.0	300	59.02	21.08	1.278	3.69	7.62	202.1	9	
0917	53 psi	3.9	300	59.02	21.11	1.294	3.77	7.58	202.4	8	
0920	53 psi	4.8	300	59.03	21.18	1.315	3.75	7.55	202.9	6	
0923	53 psi	5.7	300	59.03	21.17	1.319	3.80	7.52	202.8	5	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0914	0935	300	6	N/A	NA	59.03	0925	MWB014_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
NM	0.5	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	MWB019	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:** 75'	**Screen:** 65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	62.72	90.5	NM	27.78	1/4	0.0054	75'	0.8	1.21

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** YSI, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
		Previous Stabilized Parameters: 09-11-09			22.20	3.00	4.360	6.75	120.00	1.07	
1028	50 PSI/50:1100FL	1.25	250	62.75	21.69	2.77	5.52	6.54	-53.3	0.97	
1030	↓	1.75	↓	62.78	21.98	2.87	5.02	6.56	-50.0	0.84	
1032		2.25		62.79	22.29	2.94	4.77	6.58	-47.1	0.55	
1034		2.75		62.79	22.44	2.97	4.77	6.59	-45.9	0.63	
1036		3.25		62.79	22.45	2.98	4.81	6.63	-45.3	0.52	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1023	1036	250	3.25	N/A	NA	62.79	1037	MWB019_WG20100326_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB020	**Weather:**	~~DM~~ SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	59.5 - 89.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	56.96	89.5	18	NA	1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					21.86	2.05	3.880	6.78	121.00	0.63	
1002	50 psi	1.3	250	57.03	21.08	1.919	3.64	7.15	209.4	5	
1005	50 psi	2.0	250	57.06	21.14	1.893	3.36	7.15	209.2	4	
1008	50 psi	2.8	250	57.07	21.13	1.885	3.31	7.14	209.4	4	
1011	50 psi	3.5	250	57.07	21.20	1.882	3.25	7.16	209.2	3	
1014	50 psi	4.3	250	57.07	21.23	1.883	3.31	7.15	209.2	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0957	1016	250	5	N/A	NA	57.07	1015	MWB020_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 25 / 2010
Project No.:	1155.010	**Prepared by:**	Bens.
Well Identification:	MWB027	**Weather:**	Cloudy
Measurement Point Description:	TOC	**Pump Intake:**	77.5
		Screen:	67.5 - 87.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.65	91.5	27.85	NM	1/4	0.0054	77.5	0.8	1.22

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.24	2.11	3.720	7.03	8.00	6.01	
1132	50PSI/Sp. Nozzle	1.25	250	63.68	21.44	2.04	5.56	6.85	-20.5	7.84	
1134		1.75		63.70	21.41	2.07	4.65	6.78	-15.9	7.67	
1136		2.25		63.72	21.48	2.07	3.96	6.76	-13.1	7.58	
1138		2.75		63.72	21.55	2.07	3.87	6.75	-12.0	5.73	
1140		3.25		63.72	21.58	2.07	3.81	6.74	-10.1	4.22	
1142		3.75		63.72	21.67	2.08	3.74	6.73	-9.3	4.00	
1144	↓	4.25	↓	63.72	21.68	2.08	3.78	6.73	-9.2	3.86	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1127	1144	250	4.25	N/A	NA	63.72	1145	MWB027_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWB028	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	78
		Screen:	65 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	63.56	90	14	NA	1/4	0.0054	90	0.75	1.23

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-12-09					23.07	1.53	6.690	7.92	-68.00	2.59	
0914	56 psi	1.375	275	63.58	21.61	1.555	4.45	7.15	210.0	679	
0917	56 psi	2.2	275	63.59	21.71	1.466	4.52	7.31	209.3	636	
0920	56 psi	3.1	300	63.59	21.68	1.461	4.48	7.24	209.3	535	
0923	56 psi	4.1	325	63.59	21.76	1.451	4.51	7.23	209.3	511	
0926	56 psi	5.0	300	63.59	21.74	1.450	4.56	7.24	209.6	506	
0929	56 psi	5.9	300	63.58	21.77	1.444	4.57	7.24	209.6	490	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0909	0930	300	6	N/A	NA	63.58	0930	MWB028_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	1.3	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC004	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	106
		Screen:	96 - 116

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.53	116	47	NA	1/4	0.0054	115	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					22.64	0.79	0.440	9.60	-247.00	0.36	
1238	78 psi	1.5	300	58.80	22.04	0.851	0.93	7.70	183.6	4	
1241	78 psi	2.4	300	58.78	22.16	0.884	0.61	7.67	182.9	3	
1244	78 psi	3.3	300	58.78	22.24	0.885	0.60	7.67	182.3	3	
1247	78 psi	4.2	300	58.79	22.30	0.884	0.61	7.66	180.6	3	
1250	78 psi	5.1	300	58.78	22.25	0.884	0.60	7.67	179.6	3	
1253	78 psi	6.0	300	58.79	22.28	0.883	0.58	7.67	179.2	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1233	1315	300	6	N/A	NA	58.79	1255	MWC004_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 22 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC006	**Weather:**	partly cloudy
Measurement Point Description:	Toc.N	**Pump Intake:**	105' **Screen:** 95 - 115

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NA	60.36	115'	55	NA	1/4	0.0054	110	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: QED, CTSI lot

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 3/10/2009 9:55:00 AM					23.20	0.78	0.530	7.28	-182.00	756.00	
1329	65 psi	1.5	200	60.37	23.14	0.851	1.74	7.41	28.1	320	
1332	65 psi	2.1	200	60.39	23.08	0.850	1.41	7.42	31.3	372	
1335	65 psi	2.7	200	60.39	23.06	0.847	1.36	7.42	32.0	379	
1338	65 psi	3.3	200	60.38	23.10	0.845	1.08	7.43	32.1	368	
1341	65 psi	3.9	200	60.38	23.10	0.844	1.13	7.40	32.1	349	
1344	65 psi	4.5	200	60.38	23.12	0.844	1.09	7.39	31.7	355	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1321	1345	200	4.5	N/A	NA	60.38	1345	MWC006_WG20100322_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

PID (ppm): 0

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/22/2010
Project No.:	1155.010	**Prepared by:**	Ben S
Well Identification:	MWC007	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	107' **Screen:** 97 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
–	57.99	119	61.01	–	1/4	0.0054	107	~~8.000~~ 08	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, Public Parking Lot

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 9/9/2009 9:21:00 AM					23.01	0.92	1.720	8.92	-122.00	1.22	
~~1041~~ 1141	60PSI 30:100 off	1.5	200	~~57.02~~	22.45	~~1.032~~ 1.032	4.70	7.31	-26.1	22	
~~1043~~ 1143		2.0		58.03	22.32	1.044	3.25	7.28	-44.6	6.30	
~~1046~~ 1146		2.5		58.03	22.23	1.049	2.67	7.27	-43.5	2.60	
~~1048~~ 1148		3.0		58.03	22.17	1.052	2.44	7.27	-41.3	1.90	
1151		3.5		58.03	22.15	1.055	2.26	7.27	-38.9	2.15	
1153		4.0		58.03	22.14	1.056	2.20	7.27	-37.5	2.32	
1156		4.5		58.03	22.09	1.058	2.10	7.26	-36.3	2.28	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1133	1156	200	4.5	N/A	NA	58.03	1157	MWC007_WG201003 22 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

PID (ppm): 0.0

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	MWC009	**Weather:**	Sunny.
Measurement Point Description:	TOC	**Pump Intake:**	111' **Screen:** 101 - 121

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	61.19	125	63.81	NM	1/4	0.0054	111	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					21.97	0.86	0.300	7.39	17.00	2.20	
0929	65PSI/30.1100 L/	1.5	750	63.81	21.14	0.82	1.02	7.22	-103.6	3.99	
0931	↓	2.0	↓	63.81	21.25	0.86	0.67	7.19	-101.2	1.18	
0933		2.5		63.81	21.34	0.83	0.53	7.17	-99.2	1.25	
0935		3.0		63.81	21.35	0.84	0.46	7.15	-97.2	0.80	
0937	↓	3.5	↓	63.81	21.35	0.84	0.45	7.14	-96.2	0.64	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0923	0937	250	3.5	N/A	NA	63.81	0938	MWC009_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	DO (mg/L)
NM	0	0.8

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/22/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC011	**Weather:**	PARTLY CLOUDY
Measurement Point Description:	TOC, N	**Pump Intake:**	104 **Screen:** 94 - 114

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
NA	60.62	114	53	NA	1/4	0.0054	110	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: QED, CTSI lot

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 3/10/2009 10:27:00 AM					21.60	1.07	0.470	7.22	-161.00	126.00	
1430	68 psi	1700	240	60.63	22.33	1.627	1.44	6.95	21.1	318	
1433	68 psi	2425	240	60.63	22.29	1.631	1.35	6.97	16.0	286	
1436	68 psi	3125	240	60.63	22.21	1.635	1.35	6.95	9.2	282	
1439	68 psi	3850	240	60.63	22.23	1.635	1.27	6.94	3.8	250	
1442	68 psi	4550	240	60.63	22.17	1.631	1.11	6.95	0.9	193	
1445	68 psi	5275	240	60.63	22.17	1.603	1.13	6.93	-1.3	158	
1448	68 psi	6000	240	60.63	22.17	1.590	1.06	6.92	-4.4	149	
1451	68 psi	6725	240	60.63	22.17	1.585	1.09	6.91	-5.1	156	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1423	1453	240	7.0	N/A	NA	60.63	1453	MWC011_WG201003 22 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

PID (ppm): 0

DUP:

DRUM NO: EB-AV20100322-01 @ 1404

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC015	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	112
		Screen:	100 - 125

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	59.73	125	52	NA	1/4	0.0054	125	~~1.4~~ 0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-10-09					20.01	0.86	1.640	7.24	-171.00	30.80	
1023	78 psi	1.5	250	59.76	20.14	0.842	1.62	8.21	-22.8	8	
1026	78 psi	2.3	250	59.77	20.41	0.884	1.39	8.26	-10.3	8	
1029	78 psi	3.0	250	59.77	20.54	0.892	1.41	7.40	-1.1	7	
1032	78 psi	3.8	250	59.77	20.56	0.894	1.34	7.31	2.9	8	
1035	78 psi	4.5	250	59.77	20.53	0.894	1.29	7.16	5.9	7	
1038	78 psi	5.3	250	59.77	20.53	0.895	1.32	7.22	8.2	7	
1041	78 psi	6.0	250	59.77	20.50	0.896	1.35	7.21	9.0	8	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1017	1045	250	6	N/A	NA	59.77	1043	MWC015_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.4	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC016	**Weather:**	Sunny
Measurement Point Description:	TOC, N	**Pump Intake:**	115
		Screen:	102.5 - 127.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	60.35	127.5	55	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-12-09					23.34	1.26	5.410	8.32	-39.00	49.10	
1248	83 psi	1.5	250	60.41	22.38	1.273	2.82	7.53	136.9	10	
1251	83 psi	2.3	250	60.43	22.34	1.265	2.58	7.55	133.1	15	
1254	83 psi	3.0	250	60.44	22.29	1.273	2.55	7.55	132.1	21	
1257	83 psi	3.8	250	60.42	22.32	1.273	2.51	7.57	131.5	22	
1300	83 psi	4.5	250	60.41	22.34	1.276	2.50	7.59	130.6	12	
1303	83 psi	5.3	250	60.40	22.36	1.276	2.52	7.59	130.2	8	
1306	83 psi	6.0	250	60.41	22.33	1.278	2.46	7.60	130.7	7	
1309	83 psi	6.8	250	60.41	22.35	1.279	2.51	7.59	131.0	7	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1242	1325	250	7	N/A	NA	60.41	1312	MWC016_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.5	NM

DUP: MWC016_WG201003 24 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/16/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	MWC017	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	112.5
		Screen:	100 - 125

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.20	128	64.80	NM	1/4	0.0054	112.5	0.8	1.49

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.98	0.87	0.220	7.00	-151.00	2.32	
1153	GSPSI/50,1100 ft	1.5	250	64.80	22.53	0.82	2.52	6.97	-193.5	8.46	
1200		2.0		64.80	22.74	0.84	1.00	6.95	-194.1	3.08	
1202		2.5		64.80	22.80	0.86	0.95	6.95	-190.8	2.71	
1204		3.0		64.80	22.67	0.86	0.52	6.93	-188.4	2.16	
1206		3.5		64.80	22.67	0.87	0.49	6.93	-188.3	1.89	
1208		4.0		64.80	22.65	0.88	0.44	6.97	-188.1	1.97	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1152	1208	250	4.0	N/A	NA	64.80	1209	MWC017_WG20100326_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC021	**Weather:**	Sunny
Measurement Point Description:	TOC, N	**Pump Intake:**	110
		Screen:	97 - 122

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	61.71	122	48	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** YSI, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					23.78	0.83	0.300	9.62	-286.00	0.34	
1037	95 psi	1.4	350	61.80	22.57	0.964	0.82	7.72	-62.5	4	
1040	95 psi	2.5	350	61.81	22.45	0.959	0.55	7.72	-50.3	3	
1043	95 psi	3.5	350	61.81	22.46	0.958	0.52	7.73	-43.8	3	
1046	95 psi	4.6	350	61.82	22.48	0.958	0.53	7.72	-39.4	3	
1049	95 psi	5.6	350	61.82	22.45	0.958	0.52	7.73	-35.5	2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1033	1111	350	6	N/A	NA	61.82	1050	MWC021_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 25 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC022	**Weather:**	cloudy
Measurement Point Description:	TOC, N	**Pump Intake:**	107 **Screen:** 97 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.09	117	49	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					24.55	0.80	0.190	9.67	-261.00	0.15	
1047	70 psi	1.5	250	58.20	22.25	0.839	1.42	7.87	179.6	5	
1050	70 psi	2.3	250	58.20	22.45	0.877	0.71	7.84	180.1	4	
1053	70 psi	3.0	250	58.20	22.58	0.881	0.64	7.84	180.2	4	
1056	70 psi	3.8	250	58.20	22.68	0.885	0.67	7.84	180.3	3	
1059	70 psi	4.5	250	58.20	22.75	0.887	0.62	7.81	180.4	3	
1102	70 psi	5.3	250	58.20	22.80	0.888	0.61	7.84	180.3	2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1041	1105	250	5.5	N/A	NA	58.20	1103	MWC022_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	CHEMets 0.0 = 0.5 mg/L
NM	0	

DUP: MWC022_WG201003 25 _02
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWC023	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	107
		Screen:	97 - 117

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.00	117	49	NA	1/4	0.0054	120	0.75	1.4

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** YSI, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					23.73	0.93	0.380	7.40	-218.00	3.80	
1425	76 psi	1.5	300	58.15	22.58	1.191	0.81	7.40	-18.9	3	
1428	76 psi	2.4	300	58.14	22.52	1.252	0.49	7.38	-3.9	3	
1431	76 psi	3.3	300	58.15	22.53	1.253	0.49	7.38	2.7	3	
1434	76 psi	4.2	300	58.15	22.49	1.252	0.49	7.38	6.5	3	
1437	76 psi	5.1	300	58.15	22.56	1.251	0.49	7.38	8.6	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1420	1510	300	5	N/A	NA	58.15	1440	MWC023_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, WDR Sampling, Mar-10	**Date:**	3 / 23 / 2010
Project No.:	1155.010	**Prepared by:**	Bens.
Well Identification:	MWC024	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	108.5
		Screen:	96 - 121

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.30	125	65.7	NM	1/4	0.0054	108.5	0.8	1.4

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition:

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					22.70	1.45	0.280	7.20	-31.00	0.65	
1042	65PSI/5cm/10 slit	~~1.5~~ 1.5	250	59.30	22.56	1.49	1.05	6.99	-80.4	2.21	
1044	↓	2.0	↓	59.30	22.62	1.39	0.65	6.95	-80.0	5.03	
1046		2.5		59.30	22.62	1.39	0.52	6.93	-80.2	2.72	
1048		3.0		59.30	22.62	1.39	0.42	6.91	-80.5	3.22	
1050		3.5		59.30	22.64	1.39	0.38	6.90	-81.0	2.32	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1036	1051	250	3.5	N/A	NA	59.30	1051	MWC024_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.09	1.4	NM

DUP: MWC024_WG201003 23 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	MWG001	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	171
		Screen:	156 - 186

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	62.63	186	108	NA	1/4	0.0054	180	0.75	1.7

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					25.82	0.59	0.230	9.93	-338.00	0.42	
1129	110 psi	1.8	200	62.77	22.53	0.674	0.53	7.99	-70.0	3	
1132	110 psi	2.4	200	62.75	22.52	0.675	0.48	7.99	-64.6	3	
1135	110 psi	3.0	200	62.74	22.53	0.675	0.43	7.99	-59.9	4	
1138	110 psi	3.6	200	62.75	22.41	0.676	0.44	7.99	-57.2	3	
1141	110 psi	4.2	200	62.75	22.30	0.676	0.43	7.99	-54.9	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1120	1230	200	4.5	N/A	NA	62.75	1143	MWG001_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10		**Date:** 3/26/2010	
Project No.: 1155.010		**Prepared by:** Ben S.	
Well Identification: MWG002		**Weather:** Sunny	
Measurement Point Description: TOC		**Pump Intake:** 175	**Screen:** 162 - 192

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	63.74	195	131.26	NM	1/4	0.0054	175'	0.8	1.75

	Gallons/Foot				
					Field Equipment: YSI, Dedicated Low-flow
Well Diameter (inches) = 2	0.75	2	4	6	**Purge Method:** Micropurge
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Well Condition:** Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					24.09	0.71	0.140	8.02	-2.00	2.09	
1057	100psi/50/10 [illegible]	1.75	250	63.77	23.22	0.79	1.04	7.39	-196.9	6.70	
1059	↓	2.25	↓	63.80	23.29	0.75	0.66	7.40	-205.4	5.84	
~~1101~~ 1101		2.75		63.82	23.25	0.74	0.47	7.35	-211.4	3.83	
~~1104~~ 1103		3.25		63.82	23.37	0.73	0.43	7.29	-214.5	4.01	
1105	✓	3.75	✓	63.82	23.17	0.73	0.42	7.27	-215.0	3.72	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1050	1105	250	3.75	N/A	NA	63.82	1106	MWG002_WG20100326_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters		
Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	Ben S
Well Identification:	MWG003	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	169.5
		Screen:	154.5 - 184.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	61.63	185	123.37	NM	1/4	0.0054	169.5	0.8	1.72

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
0830	Previous Stabilized Parameters: 09-10-09				24.88	0.81	0.160	9.75	-366.00	0.77	
0835	95 PSI/50-110 mL	1.75	250	61.63	21.58	0.71	1.07	8.64	-177.6	12.7	
0837	↓	2.25	↓	61.63	21.60	0.69	0.86	8.22	-166.8	9.54	
0839		2.75		61.63	21.59	0.85	0.73	7.94	-158.4	9.37	
0841		3.25		61.63	21.63	0.81	0.75	7.67	-147.9	8.00	
0843		3.75		61.63	21.67	0.99	0.49	7.56	-141.0	3.18	
0845		4.75		61.63	21.73	~~0.854~~ 0.84	0.46	7.51	-137.1	3.02	
0847	↓	4.75	↓	61.63	21.73	0.86	0.46	7.50	-136.9	2.98	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0828	0847	250	4.75	N/A	NA	61.63	0848	MWG003_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	Beas
Well Identification:	MWG004	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	170' **Screen:** 155 - 185

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.79	186	~~186~~ 125.21	NM	1/4	0.0054	170'	0.8	1.71

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
	Previous Stabilized Parameters: 09-10-09				23.80	0.57	0.370	9.84	-359.00	2.03	
0740	95PSI/500ml/100ft	1.75	750	60.83	17.12	0.83	1.25	7.45	-230	23.5	
0742		2.25		60.85	18.16	0.63	1.04	7.28	-813	12.4	
0744		2.75		60.85	19.29	0.62	1.00	7.39	-898	4.21	
0746		3.25		60.85	20.04	0.62	0.96	7.57	-986	3.18	
0748		3.75		60.85	20.28	0.63	0.90	7.67	-1045	2.30	
0750		4.25		60.85	20.40	0.63	0.65	7.74	-1129	2.37	
0752		4.75		60.85	20.43	0.69	0.56	7.78	-1181	2.40	
0754		5.25		60.85	20.44	0.67	0.55	7.80	-1200	2.24	
0756		5.75		60.85	20.45	0.64	0.53	7.81	-1206	2.18	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0733	0756	250	5.75	N/A	NA	60.85	0757	MWG004_WG20100326_01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.1	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_06	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	77
		Screen:	67 - 87

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.81	87	18	NA	1/4	0.0054	90	0.75	1.25

	Gallons/Foot				
Well Diameter (inches) = 2	0.75	2	4	6	**Field Equipment:** YSI, Portable Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-10-09					20.45	1.68	4.850	7.10	-20.00	198.00	
0753	50 psi	1250	250	58.84	19.99	1.763	4.41	8.37	197.8	107	
0756	50 psi	2000	250	58.85	20.08	1.768	4.37	7.87	199.2	80	
0759	50 psi	2750	250	58.87	20.23	1.751	4.15	7.76	201.7	93	
0802	50 psi	3500	250	58.87	20.24	1.745	4.12	7.81	202.7	85	
0805	50 psi	4250	250	58.87	20.30	1.732	4.08	7.81	204.1	84	
0808	50 psi	5000	250	58.87	20.36	1.728	4.11	7.74	204.5	79	
0811	50 psi	5750	250	58.87	20.40	1.726	4.05	7.76	204.6	81	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0748	0820	250	6	N/A	NA	58.87	0813	TMW_06_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0.2	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	TMW_07	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	75
		Screen:	65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	60.84	91	30.16	NM	1/4	0.0054	75	0.8	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					22.82	1.66	6.110	7.10	39.00	53.00	
0731	40psi/50-/10-hz	1.25	250	60.86	20.59	1.59	5.00	7.02	143.6	15.3	
0733		1.75		60.86	20.84	1.61	5.00	7.02	139.0	14.7	
0734		2.25		60.86	20.90	1.62	5.06	7.03	135.3	14.2	
0736		2.75		60.86	20.95	1.62	5.04	7.04	131.6	13.1	
0738		3.25		60.86	21.01	1.62	4.99	7.04	126.2	12.8	
0740		3.75		60.86	21.04	1.62	5.06	7.04	123.8	12.2	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0726	0740	250	3.75	N/A	NA	60.86	0741	TMW_07_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/23/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_08	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	71
		Screen:	61 - 81

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	60.57	81	10	NA	1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Portable Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 03-16-09					22.40	2.01	3.950	7.10	-89.00	69.90	
1316	60 psi	1.2	400	60.59	22.66	2.336	0.95	7.22	113.6	44	
1319	60 psi	2.4	400	60.58	22.52	2.301	0.76	7.22	106.6	32	
1322	60 psi	3.6	400	60.59	22.48	2.275	0.72	7.22	103.4	30	
1325	60 psi	4.8	400	60.59	22.45	2.239	0.68	7.21	98.4	25	
1328	60 psi	6.0	400	60.59	22.39	2.216	0.63	7.20	95.6	9	
1331	60 psi	7.2	400	60.58	22.41	2.205	0.65	7.21	94.6	7	
1334	60 psi	8.4	400	60.59	22.42	2.203	0.63	7.20	92.7	6	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1313	1340	400	9	N/A	NA	60.59	1335	TMW_08_WG201003 23 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_10	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	70.5 **Screen:** 60.5 - 80.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	56.82	80.5	14	NA	1/4	0.0054	90	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					23.60	2.03	2.790	8.95	-51.00	2.42	
0951	65 psi	1.2	300	56.90	22.29	2.410	2.40	7.17	100.6	17	
0954	65 psi	2.1	300	56.91	22.19	2.413	2.18	7.19	101.6	11	
0957	65 psi	3.0	300	56.91	22.20	2.413	2.11	7.20	102.8	6	
1000	65 psi	3.9	300	56.91	22.23	2.414	2.16	7.22	103.4	5	
1003	65 psi	4.8	300	56.91	22.42	2.417	2.17	7.22	103.9	8	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0947	1023	300	5	N/A	NA	56.91	1005	TMW_10_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/26/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_11	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	68 **Screen:** 58 - 78

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	57.08	78	11	NA	1/4	0.0054	90	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-09-09					23.24	1.51	4.240	8.82	26.00	0.98	
0907	60 psi	1.4	350	57.12	21.97	1.889	3.92	6.15	96.7	25	
0910	60 psi	2.5	350	57.13	21.77	1.852	3.71	6.37	98.6	11	
0913	60 psi	3.5	350	57.13	21.86	1.853	3.74	6.52	100.9	5	
0916	60 psi	4.6	350	57.13	21.99	1.852	3.107	6.65	101.8	5	
0919	60 psi	5.6	350	57.12	21.93	1.854	3.71	6.64	103.0	4	
0922	60 psi	6.7	350	57.12	21.91	1.858	3.73	6.70	103.8	4	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0903	0926	350	7	N/A	NA	57.12	0923	TMW_11_WG201003 26 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3 / 25 / 2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_14	**Weather:**	cloudy
Measurement Point Description:	TOC, N	**Pump Intake:**	75 **Screen:** 65 - 85

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	66.30	85	9		1/4	0.0054	80	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					22.24	2.61	5.550	8.97	58.00	2.22	
0742	66 psi	1.2	400	66.32	21.66	3.030	5.27	6.60	215.1	18	
0745	66 psi	2.4	400	66.32	21.68	3.015	5.42	6.58	215.4	7	
0748	66 psi	3.6	400	66.32	21.70	3.009	5.37	6.68	215.9	6	
0751	66 psi	4.8	400	66.32	21.71	3.002	5.35	6.70	216.4	5	
0754	66 psi	6.0	400	66.32	21.70	2.997	5.30	6.72	216.6	5	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0739	0757	400	6	N/A	NA	66.32	0756	TMW_14_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	TMW_15	**Weather:**	Cloudy
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	62 - 87

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	64.54	87	10	NA	1/4	0.0054	90	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 2	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					22.18	1.44	5.480	9.44	-35.00	0.51	
0831	60 psi	1.2	400	64.80	20.37	1.627	4.84	7.33	215.2	47	
0834	50 psi	2.1	300	64.76	20.68	1.618	4.70	7.32	214.5	20	
0837	50 psi	3.0	300	64.75	20.69	1.617	4.72	7.25	213.8	13	
0840	50 psi	3.9	300	64.76	20.65	1.618	4.70	7.20	213.7	11	
0843	50 psi	4.8	300	64.76	20.54	1.616	4.68	7.19	213.6	9	
0846	50 psi	5.7	300	64.76	20.59	1.615	4.68	7.19	213.4	6	
0849	50 psi	6.6	300	64.76	20.58	1.615	4.72	7.19	213.7	5	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0828	0905	300	7	N/A	NA	64.76	0852	TMW_15_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DML
Well Identification:	WCC_03S	**Weather:**	Cloudy, cool
Measurement Point Description:	TOC-N	**Pump Intake:**	79
		Screen:	69 - 89

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.35	89	20'	NM	1/4	0.0054	82	0.75	1.19

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: ~~PSI~~, Dedicated Low-flow QED MP20

Purge Method: Micropurge

Well Condition: good.

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					23.53	3.62	0.590	6.68	-159.00	5.00	
10:20	SO$_{4}$: 10/5	1.2	200	59.35	22.30	4.11	0.37	6.33	-140	3.84	Clear
10:23	"	1.8	200	59.42	22.32	4.10	0.24	6.33	-145	2.88	"
10:26	"	2.4	200	59.45	22.36	4.10	0.18	6.34	-152	2.56	"
10:29	"	3.0	200	59.49	22.37	4.09	0.16	6.36	-152	2.10	
10:32	"	3.6	200	59.49	22.39	4.09	0.16	6.36	-155	2.03	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
10:20	10:32	200	3.6	N/A	NA	59.49	10:35	WCC_03S_WG201003 2 5 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/24/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	WCC_04S	**Weather:**	Sunny
Measurement Point Description:	TOC	**Pump Intake:**	80.5' **Screen:** 70.5 - 90.5

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	58.88	92	33.12	NM	1/4	0.0054	~~80.5'~~ 58.5'	0.8	12

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					23.86	2.13	3.250	6.94	81.00	3.20	
1508	50 psi/50 ml/100 ml	1.25	250	58.90	23.01	2.12	3.99	6.86	-71.9	2.28	
1510		1.75		58.92	23.01	2.19	3.08	6.81	-71.8	1.88	
1512		2.25		58.92	22.98	2.25	2.58	6.78	-72.4	2.03	
1514		2.75		58.92	23.02	2.28	2.39	6.77	-72.4	2.04	
1516		3.25		58.92	23.04	2.30	2.33	6.76	-72.5	2.05	
1518		3.75		58.92	23.05	2.28	2.29	6.70	-72.3	1.98	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1503	1518	250	3.75	N/A	NA	58.92	1519	WCC_04S_WG201003 24 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name: Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10		**Date:** 3/22/2010	
Project No.: 1155.010		**Prepared by:** BN	
Well Identification: WCC_05S		**Weather:** Partly cloudy	
Measurement Point Description: TOC		**Pump Intake:** 76	**Screen:** 61 - 91

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft)	LNAPL Thickness (ft)	Tubing Diameter (in)	Tubing Volume (Liter/foot)	Tubing Length (feet)	Flow Cell Volume (Liters)	Initial Purge Volume (Liters)
–	59.33	91	31.67	–	1/4	0.0054	76	0.80	1.2

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	
F - Gallons per foot of casing	0.02	0.16	0.65	1.47	

Field Equipment: QED, Public Parking Lot
Purge Method: Micropurge
Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 9/9/2009 10:02:00 AM					22.88	1.43	4.460	8.77	9.00	0.81	
1439	45PSI/5on/10off	1.2	200	59.35	22.09	~~2.40~~ 1.44	5.31	7.01	-2.7	4.68	
1442		1.7		59.37	22.31	1.49	4.77	6.93	0.2	3.09	
1444		2.2		59.37	22.43	1.51	4.46	6.90	1.0	2.18	
1447		2.7		59.37	22.52	1.52	4.29	6.89	1.6	1.83	
1449		3.2		59.37	22.61	1.53	4.25	6.88	1.6	1.75	
1452		3.7		59.37	22.70	1.53	4.20	6.88	1.1	1.52	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1433	1452	200	3.7	N/A	NA	59.37	1453	WCC_05S_WG201003 22 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters
PID (ppm): 0.0

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	Ben S.
Well Identification:	WCC_06S	**Weather:**	Partly cloudy
Measurement Point Description:	TOC	**Pump Intake:**	75' **Screen:** 60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NM	59.22	91	31.78	NM	1/4	0.0054	75	0.8	1.21

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: Good

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					23.39	3.66	6.930	7.20	12.60	17.20	
1102	50PSI/50-1100 ML	1.75	250	59.22	22.41	3.51	5.91	7.00	-30.3	1.73	
1104	↓	1.75	↓	59.22	22.73	3.58	6.15	7.00	-25.7	2.31	
1106	↓	2.25	↓	59.22	22.75	3.60	6.09	7.01	-22.3	1.11	
1108	↓	2.75	↓	59.22	22.23	3.62	6.14	7.00	-17.5	0.97	
1110	↓	3.25		59.22	22.14	3.63	6.08	7.00	-15.4	0.37	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1057	1110	250	3.25	N/A	NA	59.22	1111	WCC_06S_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
0.0	0	NM

DUP: WCC_06S_WG201003 25 _02

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	WCC_07S	**Weather:**	SUNNY
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.81	90	16	NA	1/4	0.0054	85	0.75	1.2

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow

Purge Method: Micropurge

Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					23.92	2.19	5.340	7.84	-6.00	1.50	
1351	60 psi	1.4	350	58.82	23.02	2.500	4.40	7.39	182.1	6	
1354	60 psi	2.5	350	58.82	22.86	2.511	4.27	7.40	180.4	5	
1357	60 psi	3.5	350	58.82	22.78	2.510	4.33	7.41	179.8	4	
1400	60 psi	4.6	350	58.82	22.73	2.505	4.34	7.41	179.8	4	
1403	60 psi	5.6	350	58.82	22.64	2.497	4.38	7.42	179.9	3	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1347	1407	350	6	N/A	NA	58.82	1405	WCC_07S_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:

DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	WCC_09S	**Weather:**	cloudy
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake**(ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	61.68	90	13	NA	1/4	0.0054	95	0.75	1.3

	Gallons/Foot				
Well Diameter (inches) = 4	0.75	2	4	6	**Field Equipment:** YSI, Dedicated Low-flow
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47	**Purge Method:** Micropurge
					Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-11-09					22.11	2.13	5.570	6.80	103.00	3.01	
1135	62 psi	1.5	300	61.84	20.78	2.005	4.90	7.37	191.3	3	
1138	62 psi	2.4	300	61.86	20.93	2.011	4.88	7.38	190.1	5	
1141	62 psi	3.3	300	61.85	20.99	2.008	4.77	7.38	190.0	4	
1144	62 psi	4.2	300	61.95	21.16	2.006	4.97	7.37	189.9	5	
1147	62 psi	5.1	300	61.86	21.22	2.005	4.89	7.38	190.0	4	
1150	62 psi	6.0	300	61.85	21.28	2.003	4.85	7.37	190.2	4	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
1130	1210	300	6	N/A	NA	61.95	1153	WCC_09S_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	CHEMets D.O. =
NM	0	5 mg/L

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

GROUNDWATER SAMPLING DATA SHEET

Project Name:	Boeing C-6 Facility, Sitewide Annual Sampling, Mar-10	**Date:**	3/25/2010
Project No.:	1155.010	**Prepared by:**	DM
Well Identification:	WCC_12S	**Weather:**	cloudy
Measurement Point Description:	TOC, N	**Pump Intake:**	75
		Screen:	60 - 90

A	B	C	D = C - B	E = B - A	G	H	I	J	K = H x I + J
Depth to LNAPL (ft-bmp)	**Depth to Static Water Level** (ft-bmp)	**Well Total Depth** (ft-bmp)	**Water Column Above Pump Intake** (ft)	**LNAPL Thickness** (ft)	**Tubing Diameter** (in)	**Tubing Volume** (Liter/foot)	**Tubing Length** (feet)	**Flow Cell Volume** (Liters)	**Initial Purge Volume** (Liters)
NA	58.07	90	17	NA	1/4	0.0054	95	0.75	1.3

	Gallons/Foot			
Well Diameter (inches) = 4	0.75	2	4	6
F - **Gallons per foot of casing**	0.02	0.16	0.65	1.47

Field Equipment: YSI, Dedicated Low-flow
Purge Method: Micropurge
Well Condition: GOOD

Time	Flow Controller Settings	Volume Purged (Liters)	Flow Rate (mL/min)	Water Level (ft-bmp)	Temperature (°C) [+/- 10%]	Conductivity (mS/cm) [+/- 10%]	Dissolved Oxygen (mg/L) [+/- 10%]	pH [+/- 0.1 pH]	ORP (mV) [+/- 10%]	Turbidity (NTU) [+/- 10%]	Observations
Previous Stabilized Parameters: 09-10-09					21.77	1.69	6.420	7.15	31.00	2.65	
0930	58 psi	1.5	300	58.16	19.99	1.679	5.33	7.39	214.9	7	
0933	58 psi	2.4	300	58.17	20.24	1.680	5.27	7.37	214.2	6	
0936	58 psi	3.3	300	58.15	20.30	1.677	5.19	7.36	214.0	5	
0939	58 psi	4.2	300	58.16	20.49	1.667	5.24	7.35	214.0	5	
0942	58 psi	5.1	300	58.16	20.41	1.660	5.25	7.35	214.1	6	

Purge Start Time	Purge End Time	Average Flow (mL/min)	Total Volume Purged (Liters)	Total Casing Volumes Purged	80% Recovery Water Level Depth (Dx0.20) + B	Water Level at Sampling Time (ft bmp)	Sample Collection Time	Sample Identification
0925	0944	300	5	N/A	NA	58.16	0943	WCC_12S_WG201003 25 _01

Notes: (units) [stabilization criteria]
Purging will continue until three consecutive measurements are within stabilization criterion.

Field Parameters

Ferrous Iron (mg/L)	PID (ppm):	
NM	0	NM

DUP:
DRUM NO:

AVOCET ENVIRONMENTAL, INC.

QA/QC SAMPLE IDENTIFICATION FORM

Project Name:	Boeing Former C-6 Facility, WDR/Semi-annual Sitewide Sampling, March 2010	Project No.:	1155.010

Date	Time	QA/QC Sample Type (Duplicate, Field Blank, Equipment Blank, Split)	Sample ID	Sample Location	Primary Sample Reference	Analytical Methods	Organic-Free Water Source	Field Personnel	Comments
03/22/10	14:04	Equip. Blank	EB_AV20100322_01	-		8260B	TA-I	BS	
03/22/10	-	Trip Blank	TB_AV20100322_01	-		8260B	TA-I	-	
03/23/10	15:26	Equip. Blank	EB_AV20100323_01	-		8260B	TA-I	DM	
03/23/10	10:51	Duplicate	MWC024_WG20100323_02	MWC024	MWC024_WG20100323_01	8260B	-	BS	
03/24/10	13:45	Equip. Blank	EB_AV20100324_01	-		8260B	TA-I	BS	
03/24/10	-	Trip Blank	TB_AV20100324_01	-		8260B	TA-I	-	
03/24/10	13:12	Duplicate	MWC016_WG20100324_02	MWC016	MWC016_WG20100324_01	8260B	-	DM	
03/25/10	-	Trip Blank	TB_AV20100325_01	-		8260B	TA-I	-	
03/25/10	11:11	Duplicate	WCC_06S_WG20100325_02	WCC_06S	WCC_06S_WG20100325_01	8260B	-	BS	
03/25/10	11:03	Duplicate	MWC022_WG20100325_02	MWC022	MWC022_WG20100325_01	8260B	-	DM	
03/26/10	-	Trip Blank	TB_AV20100326_01	-		8260B	TA-I	-	

S:\Projects\1155 Boeing Former C-6 Facility\Groundwater Monitoring\March 2010\Completed Field Forms\[qaqc sample id form_20100326.xlsx]Sheet1

AVOCET ENVIRONMENTAL, INC.

16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100323C

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, WDR Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Analyses

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs (8260B)	TOC (EPA 9060)	Volatile Fatty Acids	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625) H	CAM Title 22 Metals (200.7) H	Flashpoint H	Cyanides (total) H	Sulfides (dissolved) H	Pesticides/PCBs (608) H	Chemical Oxygen Demand (COD) H	Total Suspended Solids H	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD H	Perchlorate 314.0 H	Boron-200.7 H	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Chloride EPA 300.0	Total Dissolved Solids EPA 160.1 H	Dehalococcoides spp. Strains (qPCR test)	
CMW026_WG20100323_01	03/23/10	10:58	WATER	12		X	X	X	X													X			X	
IRZCMW001_WG20100323_01	03/23/10	9:59	WATER	12		X	X	X	X										Hold				X	X	X	
CMW002_WG20100323_01	03/23/10	11:39	WATER	19		X	X	X	X	X	X							X	X	X			X	X	X	
IRZCMW002_WG20100323_01	03/23/10	8:31	WATER	19		X	X	X	X	X	X							X	X	X		X			X	
MWC024_WG20100323_01	03/23/10	10:51	WATER	7		X	X		X																	
MWC024_WG20100323_02	03/23/10	10:51	WATER	3		X																				
IRZCMW003_WG20100323_01	03/23/10	11:33	WATER	23		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	
TB_AV20100323_01	03/23/10	-	WATER	3		X																		hold		

Analyze all "X" - formerly on hold 3/26

Relinquished by	Company	Received by	Company
Printed Name: David Lieberman Date: 3-23-10	Avocet Environmental, Inc.	Printed Name: Tony Power Date: 3/23/10	TA-I
Signature: [signature] Time: 13:50		Signature: [signature] Time: 1350	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA. Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103
Temperature °C ____ °F ____		
COC Seal (Y/N/NA)		

C:\Documents and Settings\David\My Documents\Avocet\1155\FieldForms\master coc_av201003

AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100323B

CHAIN OF CUSTODY RECORD

Project Information:	
Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	Analyses: VOCs (8260B)	TOC (EPA 9060)	Volatile Fatty Acids	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)
EWB001_WG20100323_01	03/23/10	8:35	WATER	3		X																		
MWB028_WG20100323_01	03/23/10	9:30	WATER	3		X																		
TMW_08_WG20100323_01	03/23/10	13:35	WATER	11		X				H	H							X	H	H	H	X	H	
MWB003_WG20100323_01	03/23/10	14:57	WATER	18		X			X	H	H	H	H	H	H	H	H	X	H	H	H	X	H	
IRZMW004_WG20100323_01	03/23/10	13:09	WATER	18		X			X	H	H	H	H	H	H	H	H	X	H	H	H	X	H	
IRZMW005_WG20100323_01	03/23/10	14:42	WATER	6		X			X	H	H	H	H	H	H	H	H	X	H	H	H	X	H	
WCC_05S_WG20100322_01	03/22/10	14:53	WATER	3		X			X															
DAC-P1_WG20100322_01	03/22/10	13:58	WATER	3		X																		
BL-03_WG20100322_01	03/22/10	13:09	WATER	3		X																		
MWC007_WG20100322_01	03/22/10	11:57	WATER	3		X																		
MWC011_WG20100322_01	03/22/10	14:53	WATER	3		X																		
MWC006_WG20100322_01	03/22/10	13:45	WATER	3		X																		
TB_AV20100322_01	03/22/10	-	WATER	3		X																		
EB_AV20100322_01	03/22/10	14:04	WATER	3		X																		
EB_AV20100323_01	03/23/10	15:26	WATER	3		X																		

Analyze all "X" - Formerly on hold 3/26

H = HOLD

Relinquished by		Company	Received by		Company
Printed Name: Darren Bradner	Date: 3-23-10	Avocet Environmental, Inc.	Printed Name:	Date:	
Signature:	Time: 17:50		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name: WILL KIM	Date: 3/23/10	
Signature:	Time:		Signature:	Time: 17:50	1.0

Sample Receipt	Billing Information
Total Containers	
Temperature °C / °F	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327
COC Seal (Y/N/NA)	

DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA
Primary DHG analyses will continue to be analyzed by ATL.
Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103

C:\Documents and Settings\David\My Documents\Avocet\1155\FieldForms\master coc_av201003

AVOCET ENVIRONMENTAL, INC.

16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100324A

CHAIN OF CUSTODY RECORD

Project Information:	
Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Analyses

H = HOLD

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs (8260B)	TOC (EPA 9060)	Volatile Fatty Acids	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)		
EWC001_WG20100324_01	03/24/10	14:10	WATER	15		X(1)				X	X	X	X	X	X	X	X	X	X	X	X	X	X			
TMW_06_WG20100324_01	03/24/10	8:13	WATER	11		X				X	X							X	X	X	X	X	X			
MWB014_WG20100324_01	03/24/10	9:25	WATER	10		X				X	X							X	X	X						
MWC015_WG20100324_01	03/24/10	10:43	WATER	15		X				X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MWB012_WG20100324_01	03/24/10	12:05	WATER	6		X			X																	
MWC016_WG20100324_01	03/24/10	13:12	WATER	11		X				X	X							X	X	X	X	X	X			
MWC016_WG20100324_02	03/24/10	13:12	WATER	3		X																				
MW0005_WG20100324_01	03/24/10	14:21	WATER	15		X				X	X	X	X	X	X	X	X	X	X	X	X	X	X			
IWC001_WG20100324_01	03/24/10	15:34	WATER	5		X												X	X							
IRZMW001B_WG20100324_01	03/24/10	9:29	WATER	6		X			X	Analyze all "X" - for week, on Hold																

Relinquished by	Company	Received by	Company
Printed Name: D. Lieberman Date: 3-24-10	Avocet Environmental, Inc.	Printed Name: Date:	
Signature: Time: 17:45		Signature: Time:	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	
Printed Name: Date:		Printed Name: WEC CIH Date: 3/25/10	
Signature: Time:		Signature: Time: (7:45)	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103 (1) Run dilutions on the VOC sample from EWC001
Temperature °C / °F		
COC Seal (Y/N/NA)		

C:\Documents and Settings\David\My Documents\Avocet\1155\FieldForms\master coc_av201003

AVOCET ENVIRONMENTAL, INC.

16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100324A

CHAIN OF CUSTODY RECORD

H = HOLD

Project Information:	
Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Analyses

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs (8260B)	TOC (EPA 9060)	Volatile Fatty Acids	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)
IRZMW002B_WG20100324_01	03/24/10	10:05	WATER	6		X			X															
IRZMW003B_WG20100324_01	03/24/10	10:39	WATER	6		X			X															
IRZMW002A_WG20100324_01	03/24/10	11:18	WATER	18		X			X	~~H~~	~~H~~	~~H~~	~~H~~	~~H~~	~~H~~	~~H~~	~~H~~	X	~~H~~	~~H~~	~~H~~	X	~~H~~	
IRZMW001A_WG20100324_01	03/24/10	12:20	WATER	6		X			X															
IRZMW003A_WG20100324_01	03/24/10	12:43	WATER	6		X			X															
WCC_04S_WG20100324_01	03/24/10	15:19	WATER	6		X			X															
TMW_07_WG20100324_01	03/24/10	7:41	WATER	3		X																		
TB_AV20100324_01	03/24/10	-	WATER	2		X																		
EB_AV20100324_01	03/24/10	13:45	WATER	3		X																		

Analyze all "X" - formerly on hold @AV 3/26

Relinquished by		Company	Received by		Company
Printed Name: D. Lieberman	Date: 3-24-10	Avocet Environmental, Inc.	Printed Name:	Date:	
Signature: [signature]	Time: 17:45		Signature:	Time:	
Printed Name:	Date:		Printed Name:	Date:	
Signature:	Time:		Signature:	Time:	
Printed Name:	Date:		Printed Name: NTL KTM	Date: 3/24/10	
Signature:	Time:		Signature: [signature]	Time: 17:45	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103 (1) Run dilutions on the VOC sample from EWC001
Temperature °C ______ °F		
COC Seal (Y/N/NA)		

0.8

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AVOCET ENVIRONMENTAL, INC.

16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Sheet 1 of 2

Boeing CoC No. AV20100325B

CHAIN OF CUSTODY RECORD

H = HOLD

Project Information:	
Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	Analyses: VOCs (8260B)	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)	Target for Tier 1 Data Validation	Target for Tier 2 Data Validation	Target for Tier 3 Data Validation
AW0077UB_WG20100325_01	03/25/10	9:42	WATER	6		X	X																		
EWB002_WG20100325_01	03/25/10	10:09	WATER	6		X	X																X		
AW0073C_WG20100325_01	03/25/10	10:41	WATER	6		X	X																		
WCC_06S_WG20100325_01	03/25/10	11:11	WATER	3		X																	X		
WCC_06S_WG20100325_02	03/25/10	11:11	WATER	3		X																			
MWB027_WG20100325_01	03/25/10	11:45	WATER	7		X	X									X							X		
AW0075UB_WG20100325_01	03/25/10	12:53	WATER	6		X	X																		
AW0064UB_WG20100325_01	03/25/10	13:30	WATER	6		X	X																		
AW0074UB_WG20100325_01	03/25/10	14:08	WATER	14		X	X	H	H							X	H	H	H	X	H		X		
WCC_03S_WG20100325_01	03/25/10	10:35	WATER	18		X(1)	X	H	H	H	H	H	H	H	H	X	H	H	H	X	H				
MWB006_WG20100325_01	03/25/10	12:18	WATER	6		X(1)	X																		
AW0055UB_WG20100325_01	03/25/10	15:06	WATER	6		X	X																		
IRZB0095_WG20100325_01	03/25/10	7:49	WATER	6		X	X																X		

Analyze all "X" - formerly on hold 3/16

Relinquished by	Company	Received by	Company
Printed Name: D.L. Liberman Date: 3-25-	Avocet Environmental, Inc.	Printed Name: Angel Ruiz Date: 3/27/10	TAI
Signature: Time: 1745		Signature: Time: 1147	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	
Printed Name: Date:		Printed Name: Date:	
Signature: Time:		Signature: Time:	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103 (1) Run dilutions on the VOC samples from WCC_03S and MWB006
Temperature °C 1.1 °F		
COC Seal (Y/N/NA)		

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AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100325B

CHAIN OF CUSTODY RECORD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Analyses

H = HOLD

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	VOCs (8260B)	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)	Target for Tier 1 Data Validation	Target for Tier 2 Data Validation	Target for Tier 3 Data Validation
IRZB0081_WG20100325_01	03/25/10	8:30	WATER	6		X	X																		
MWB020_WG20100325_01	03/25/10	10:15	WATER	6		X	X																		
MWC022_WG20100325_01	03/25/10	11:03	WATER	3		X																		X	
MWC022_WG20100325_02	03/25/10	11:03	WATER	3		X																			
WCC_07S_WG20100325_01	03/25/10	14:05	WATER	6		X	X																		X
MWC023_WG20100325_01	03/25/10	14:40	WATER	15		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MWB007_WG20100325_01	03/25/10	15:45	WATER	3		X																			
TMW_14_WG20100325_01	03/25/10	7:56	WATER	5		X										X	X								
TMW_15_WG20100325_01	03/25/10	8:52	WATER	12		X	X	X	X							X									
WCC_12S_WG20100325_01	03/25/10	9:43	WATER	3		X																			
WCC_09S_WG20100325_01	03/25/10	11:53	WATER	11		X		X	X							X	X	X	X	X	X				
MWC004_WG20100325_01	03/25/10	12:55	WATER	15		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
TB_AV20100325_01	03/25/10	-	WATER	2		X																			

Analyze all 3x's - formerly on Hold per 3/26

Relinquished by	Company	Received by	Company
Printed Name: D. Lieberman	Avocet Environmental, Inc.	Printed Name: Angel Hyer	TAT
Signature:		Signature:	
Date: 3-25-10		Date: 3/25/10	
Time: 1745		Time: 1745	
Printed Name:		Printed Name:	
Signature:		Signature:	
Date:		Date:	
Time:		Time:	
Printed Name:		Printed Name:	
Signature:		Signature:	
Date:		Date:	
Time:		Time:	

Sample Receipt	Billing Information	
Total Containers	Bill To: Michael Rendina, P.G. AVOCET ENVIRONMENTAL, INC. 16 Technology Dive, Suite 154 Irvine, CA 92618-2327	DHC PCR Analyses require **overnight** delivery to NorthWind in Pittsburgh, PA Primary DHG analyses will continue to be analyzed by ATL. Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103 (1) Run dilutions on the VOC samples from WCC_03S and MWB006
Temperature °C 1.1 °F		
COC Seal (Y/N/NA)		

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AVOCET ENVIRONMENTAL, INC.
16 Technology Drive, Suite 154
Irvine, California 92618-2327
TEL (949) 296-0977
FAX (949) 296-0978

Boeing CoC No. AV20100326A

CHAIN OF CUSTODY RECORD

H = HOLD

Project Information:

Site Name	Boeing Former C-6 Facility, Sitewide Sampling, March 2010
Site Address	Los Angeles, CA
Project No.	1155.010
Project Manager	Michael Rendina
Sampled By	Blaine Tech
Turn-Around-Time	Standard TAT

Sample Identification	Sample Date	Sample Time	Matrix	No. of Cntnrs.	Lab I.D. Number	Analyses: VOCs (8260B)	Diss. Hydrocarbon Gases (ethane, ethene, methane)	SVOCs incl 1,4-dioxane (8270) and NDMA (1625) - (see note 1)	CAM Title 22 Metals (200.7)	Flashpoint	Cyanides (total)	Sulfides (dissolved)	Pesticides/PCBs (608)	Chemical Oxygen Demand (COD)	Total Suspended Solids	Hexavalent Chromium (7199)	pCBSA - 314.0 MOD	Perchlorate 314.0	Boron-200.7	Anions (NO3, NO2, Cl, SO4) EPA 300.0	Total Dissolved Solids EPA 160.1	Dehalococcoides spp. Strains (qPCR test)	Target for Tier 1 Data Validation	Target for Tier 2 Data Validation	Target for Tier 3 Data Validation
MWG004_WG20100326_01	03/26/10	7:57	WATER	10		X		X	X							X	X	X							
MWG003_WG20100326_01	03/26/10	8:48	WATER	10		X		X	X							X	X	X							
CMW001_WG20100326_01	03/26/10	8:00	WATER	4		X											X								
MWB013_WG20100326_01	03/26/10	8:35	WATER	9		X		X	X							X									
TMW_11_WG20100326_01	03/26/10	9:23	WATER	4		X											X								
TMW_10_WG20100326_01	03/26/10	10:05	WATER	9		X		X	X								X								
MWC021_WG20100326_01	03/26/10	10:50	WATER	10		X		X	X							X	X	X							
MWG001_WG20100326_01	03/26/10	11:43	WATER	15		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MWC009_WG20100326_01	03/26/10	9:38	WATER	15		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MWB019_WG20100326_01	03/26/10	10:37	WATER	5		X										X	X								
MWG002_WG20100326_01	03/26/10	11:00	WATER	15		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MWC017_WG20100326_01	03/26/10	12:09	WATER	5		X										X	X								
TB_AV20100326_01	03/26/10	-	WATER	2		X																			

Relinquished by	Company	Received by	Company
Printed Name: D. Lieberman	Avocet Environmental, Inc.	Printed Name: Angel Perez	TAI
Signature:		Signature:	
Date: 3-26-10		Date: 3/26/10	
Time: 1515		Time: 1515	
Printed Name:		Printed Name:	
Signature:		Signature:	
Date:		Date:	
Time:		Time:	
Printed Name:		Printed Name:	
Signature:		Signature:	
Date:		Date:	
Time:		Time:	

Sample Receipt

Total Containers

Temperature °C 17C
°F

COC Seal (Y/N/NA)

Billing Information

Bill To: Michael Rendina, P.G.
AVOCET ENVIRONMENTAL, INC.
16 Technology Dive, Suite 154
Irvine, CA 92618-2327

DHC PCR Analyses require overnight delivery to NorthWind in Pittsburgh, PA
Primary DHG analyses will continue to be analyzed by ATL.
Please bill to Avocet. Please report electronically in accordance with Boeing standards. If any questions, please call Mike Rendina @ (949) 296 0977 Ext.103
(1) For all SVOC analyses, run dilutions if MDL is elevated over 20 ug/L.

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TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Boeing C-6 | **PROJECT NUMBER** 100822-BM1

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556	10A100055	3.22.10 1116	pH7 pH4 pH10	7.20 4.10 9.98	7.00 4.00 10.00	18.64°C	BM
↓	↓	↓	3400 uS 237.5 mV 100 %DO	3899 uS 212.6 mV 102.5 %	3400 uS 237.4 mV 100.4 %	18.81°C	BM
YSI 556	10A100055	3.23.10 0650	pH7 pH4 pH10	7.15 4.15 9.87	7.00 4.00 10.00	17.67°C	BM
↓	↓	↓	3400 uS 237.5 mV 100 %DO	3919 uS 243.3 mV 99.7 %	3900 uS 237.5 mV 100.1 %	17.76°C	BM
YSI 556	10A100055	3.24.10 0650	pH7 pH4 pH10	7.18 4.09 9.88	7.00 4.00 10.00	18.81°C	BM
↓	↓	↓	3400 uS 237.5 mV 100 %DO	3964 uS 237.1 mV 115.4 %	3400 uS 237.5 mV 100.4 %	18.67°C	BM
YSI 556	10A100055	3.25.10 0650	pH7 pH4 pH10	6.90 3.77 9.93	7.00 4.00 10.00	18.52°C	BM
↓	↓	↓	3400 uS 237.5 mV 100 %DO	3877 uS 230.8 mV 87.8 %	3400 uS 237.5 mV 100.6 %	18.76°C	BM
YSI 556	10A100055	3.26.10 0650	pH7 pH4 pH10	7.11 4.11 9.96	7.00 4.00 10.00	17.83°C	BM
↓	↓	↓	3400 uS 237.5 mV 100 %DO	3873 uS 240.8 mV 87.0 %	3400 uS 237.5 mV 100.5 %	17.96°C	BM

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Avocet @ Boeing C-6			PROJECT NUMBER	100322-BW1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP. °C	INITIALS
YSI 556 MPS	06F2009 AD	3/22/10 1255	pH 7.00 4.00 10.00	7.54 4.03 9.69	7.00 4.00 10.00	20.32 21.45 21.87	DM DM DM
			SPEC. COND. 3900 µS/cm	3722 µS/cm	3900 µS/cm	21.17	DM
			O.R.P. 233.5 mV @ 23°C	248.0 mV	233.5 mV	22.96	DM
			D.O. % SAT (ambient)	96.4 %	100.3 %	26.37	DM
		3/23/10 0655	pH 7.00 10.00 4.00	6.85 10.11 4.08	7.00 10.00 4.00	19.39 19.20 19.41	DM DM DM
			SPEC. COND. 3900 µS/cm	3891 µS/cm	3900 µS/cm	19.47	DM
			O.R.P. 239.5 mV @ 18.5°C	240.9 mV	239.5 mV	18.62	DM
			D.O. % SAT (ambient)	110.7 %	99.8 %	16.55	PM
		3/24/10 0700	pH 7.00 4.00 10.00	6.79 3.91 9.86	7.00 4.00 9.98	18.23 18.34 17.60	DM DM DM
			SPEC. COND. 3900 µS/cm	3982 µS/cm	3900 µS/cm	18.61	DM
			O.R.P. 241 mV @ 17.5°C	241.9 mV	241.0 mV	17.43	DM
			D.O. % SAT (ambient)	103.6 %	100.3 %	15.90	DM

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Avocet @ Boeing C-6			PROJECT NUMBER	100322-BN1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP. °C	INITIALS
YSI 550 MPS	06F2009AD	3/25/10 0700	pH 7.00 10.00 4.00	7.10 9.89 3.95	7.00 10.00 4.00	17.65 17.74 17.86	DM DM DM
			SPEC COND. 3900 µS/cm	3970 µS/cm	3900 µS/cm	17.81	DM
			O.R.P. 240 mV @ 18°C	239.6 mV	240.0 mV	18.15	DM
			D.O. % SAT (ambient)	91.7 %	100.2 %	16.20	DM
		3/26/10 0705	pH 7.00 4.00 10.00	6.93 3.93 10.16	7.00 4.00 10.00	17.67 16.38 17.62	DM DM DM
			SPEC. COND. 3900 µS/cm	3726 µS/cm	3900 µS/cm	16.97	DM
			O.R.P. 244 mV @ 15°C	246.0 mV	244.0 mV	15.17	DM
			D.O. % SAT (ambient)	102.7 %	100.4 %	15.06	DM